

Dual protection among South African women and men: perspectives from HIV care, family planning and sexually transmitted infection services

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ABBREVIATIONS

AIDS: acquired immune deficiency syndrome

DM: dual method use

DP: dual protection

EC: emergency contraception

FP: family planning

HIV: human immunodeficiency virus

PMTCT: prevention of mother to child transmission of HIV

STI: sexually transmitted infection

TOP: termination of pregnancy

VCT: voluntary counselling and testing

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PART 1. BACKGROUND

Background

The HIV/AIDS epidemic in South Africa

South Africa currently faces one of the worst HIV/AIDS epidemics in the world. The HIV epidemic in South Africa has grown exponentially in the past fifteen years, with antenatal HIV surveillance data showing an increase in prevalence from less than 1% in 1990 to almost 32% in 2004.[1] In addition to this rapid expansion, the HIV epidemic in South Africa features distinctive age and gender distributions, with young women of reproductive age appearing to be at the greatest risk of infection, and overall the epidemic has affected proportionally more women than men.[2, 3]

Currently, an estimated 5,000,000 South Africans, or approximately one in every nine, are living with HIV.[4] These high levels of infection are likely to increase further over the next few years based on the best available modeling efforts.[5, 6]

Within South Africa, the HIV epidemic has spread over time, with the Western and Eastern Cape provinces experiencing today the same surge in HIV prevalence that was observed in the KwaZulu-Natal province five years ago [Figure 1]. For example, the prevalence of HIV among women attending

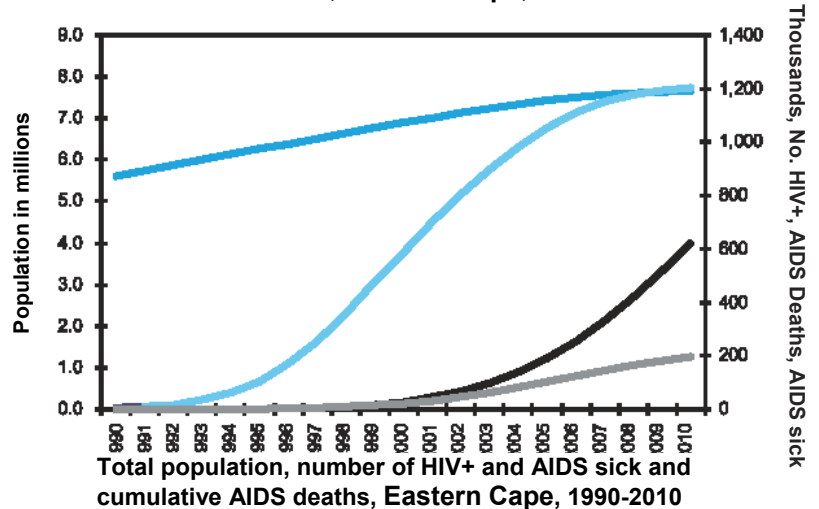
antenatal clinics in the Western Cape has increased from 1.2% in 1994 to 12.4% in 2002.[7] During the same period, the estimated prevalence of HIV among antenatal clinic attenders in the Eastern Cape increased from 3.9% to 21.3%. Although they are extremely high by international standards, these provincial averages belie substantial regional variation, with urban centres in each province (such as Cape Town and Umtata) acting as the centre of local epidemics.

Continued reproductive health concerns

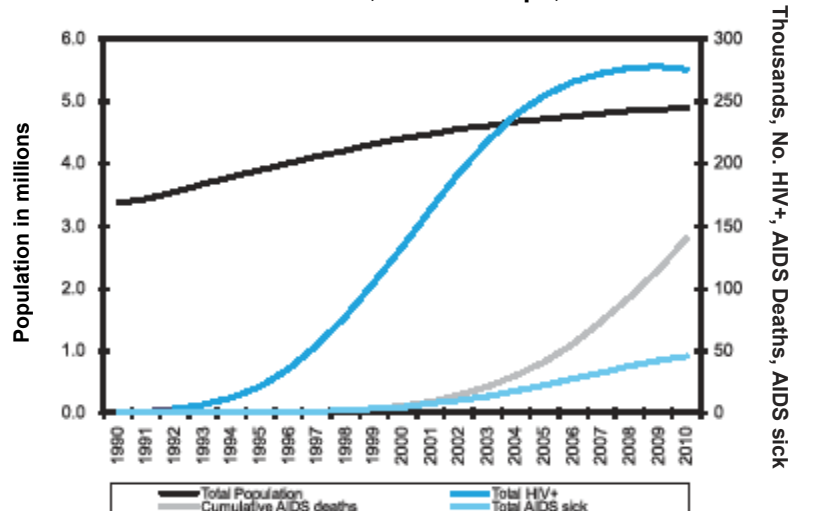
The HIV/AIDS epidemic in South Africa has increased the importance of reproductive health issues in overall population health. A concurrent epidemic of sexually transmitted infections (STI) has helped to fuel the spread of HIV [8, 9], increases in cervical cancer rates are emerging as the HIV epidemic matures[10, 11], and HIV-related maternal mortality may be increasing.[12]

In addition, there continue to be major fertility-related health concerns in South Africa, independent of HIV/AIDS, as women experience high rates of teenage and unintended

Total population, number of HIV+ and AIDS sick and cumulative AIDS deaths, Western Cape, 1990-2010



Total population, number of HIV+ and AIDS sick and cumulative AIDS deaths, Eastern Cape, 1990-2010



pregnancy despite the availability and use of family planning services. Thirty-five percent of South African women have been pregnant by age 19, and up to 53% of South African pregnancies are either unplanned (36%) or unwanted (17%).[13] In Cape Town, an estimated 98% of teenage pregnancies are unplanned.[14] Unintended pregnancy contributes directly to both legal and to unsafe abortions, the latter associated with substantial preventable morbidity.[15]

These high rates of unplanned pregnancy continue despite relatively well-developed family planning services. Hormonal contraception is provided free-of-charge through most public sector clinics, particularly in urban areas.[13] Availability is reflected by high levels of contraceptive use across the country: 75% of South African women between the ages of 15 and 49 have used a contraceptive method, and 61% of sexually active 15 to 49 year-old South African women currently use a method of contraception.[13] In South Africa, the progestogen-only injectable contraceptive (as either a two-month or three-month injection) is the most common method (49% of current contraceptive use), followed by the oral contraceptive (22% of current contraceptive use).[13] Oral contraceptive use is increasing rapidly, especially among women aged 24-34, for whom it comprises 28% of current contraceptive use.[13]

The role of dual protection

Given the major roles of HIV, sexually transmitted infections and unwanted pregnancy play in shaping public health in South Africa, there is an urgent need for improved interventions that address these interrelated concerns. **Dual protection (DP)**, the simultaneous protection against sexually transmitted infections and unwanted pregnancy, represents an important option for South African women and men. The promotion of DP is an explicit part of South African national guidelines for contraceptive services.[16] Current policies around DP focus on the importance of addressing the wide range of needs that women face across the country, and emphasize the potential trade-offs that women may face in protecting themselves during sexual intercourse.

There are a range of different approaches to achieve DP, and different approaches may be optimal in different settings. For many women and men, DP means the use of barrier methods (such as male and female condoms) with emergency contraception as a backup in the event of method failure. **Dual method use** (the use of two separate methods, usually a combination of barrier and hormonal methods) may be preferred in instances where pregnancy is particularly undesirable. For instance, dual method use such as male condoms combined with injectable contraceptives may be a particularly important intervention for HIV-positive individuals, for whom prophylaxis and contraception is likely to take on special importance. In addition, for some women and men another possible option for DP is the delaying of sexual initiation, abstinence, or non-penetrative intercourse.

Despite the importance of dual protection as a reproductive health intervention in South Africa, there is surprisingly little known about the approaches of women and men to achieving DP. Related to this, there are few insights into how health care services can best promote DP in different populations. Furthermore, there are few data on men's perspectives of dual protection/method use.

There are a number of notable gaps in existing understandings of dual protection and dual method use in southern Africa. First, despite several studies among clients, little is known about health service providers' attitudes towards dual protection and dual method use. Certainly health care providers play a fundamental role in promoting contraception and reproductive health services in South Africa, including around the choice of hormonal contraceptives and the use condoms [17, 18]. In addition, most insights into DP and dual method use in southern Africa come from family planning services, and there are few insights

into other primary health care services where the promotion of DP may be an important option for clients. Specifically, DP and dual method use are clearly relevant in the context of HIV care services (including, but not limited to, antiretroviral therapy (ART) and in services for the screening and treatment of other STI.

PART 2. AIMS AND METHODS

Study aim

This research aimed **to explore the current approaches towards dual protection among men and women attending HIV care and family planning/STI services, and the health care providers working in these services.**

Key research questions

The following key research questions were used to guide the research:

- *Dual protection and dual method use*: What is the prevalence of (a) knowledge and (b) practices related to dual protection and dual method use in these populations? What forms of dual protection and dual method use are most commonly employed? What motivates different forms of dual protection and dual method use? What dominant perceptions exist regarding different methods among (a) patients and (b) providers?
- *Contraception and prophylaxis*: What are patients' and providers' experiences regarding dual protection and dual method use in each health service? Which contraceptive methods are thought to be most desirable, and why? In what situations (if ever) do providers promote dual method use? How are condoms perceived as contraceptive options?
- *HIV and ART*: How do HIV diagnosis and HIV treatment (availability and/or initiation of ART) influence attitudes towards contraception, prophylaxis against other STIs, and related sexual behaviours (including, unprotected sex, new partner acquisition, sexual intercourse with partners of unknown HIV status)?

Specific objectives

The specific objectives of this study were to:

1. describe sexual behaviour, condom and contraceptive use among women and men in 3 populations: patients attending HIV care and family planning/STI treatment services
2. describe and compare the prevalence of (a) knowledge and (b) practices related to dual protection and dual method use in these populations
3. identify demographic and behavioural correlates of dual protection and dual method use in these populations
4. describe the knowledge, attitudes and practices of health care providers with regards to the dual protection and dual method use

5. describe the basic socio-demographic, reproductive, sexual and partnership characteristics of people surveyed

Setting

The research took place in two separate regions in South Africa: an urban setting in Cape Town, Western Cape and a rural setting near Umtata (Mthatha) in the former Transkei region of the Eastern Cape. This allowed exploration of the key research questions in two very different health care systems, each facing unique challenges: the extremely busy, urban township clinics of Khayelitsha in Cape Town, and the less developed, rural clinics outside of Umtata.

In each region, two facilities were selected to participate in research. Each facility provides a range of primary care services. For this research, participants were recruited from HIV care services, family planning services, and STI services only.

In Cape Town, the sites were local authority clinics and in Umtata, the sites were Community Health Centers operated by the local authority.

Facilities were selected in consultation with provincial / local health care officials based on the following criteria: (a) the degree to which they are typical of primary care clinics in the area, (b) the preference of provincial officials to avoid over-researched facilities, and (c) adequate patient volumes to ensure efficient data collection.



Research collaboration

In addition to providing insights from different urban and rural settings, the two-province design of the research built on existing collaborations between the School of Public Health at the University of Cape Town and the Department of Obstetrics and Gynaecology at the University of the Transkei (now Walter Sisulu University). This partnership provided a unique opportunity to examine the issues related to DP practices and promotion in two very distinct settings.

Study design

The study was carried out in two interrelated phases. First, exploratory qualitative research via a series of focus group discussions involving women and men (recruited from HIV care and family planning/STI services) was used to collect preliminary information on the key research questions detailed above. The results from this phase of research were used to design the instruments for phase two of the project, which was a quantitative study among both clients and health care workers. The main outcomes of the research are based on the quantitative findings. Detailed information on the focus group discussions is in Appendix C.

Structured interviews with participants from HIV care and FP/STI services

Structured interviews were conducted with women and men attending HIV care and FP/STI services at each of the participating clinics. Participants were selected consecutively, with a log to record the proportion of participants who did not participate. Participants were recruited as they exited the services and interviewed regardless of gender, if they were over the age of 14 years. Participants recruited from HIV care services included those receiving antiretroviral therapy as well as individuals not receiving treatment, but patients were not selected

systematically according to their ART status. Patients newly diagnosed with HIV (less than 3 months) were not included.

Interviews were structured and lasted approximately 20-30 minutes. The interviews were conducted by one of three trained interviewers (1 male, 2 female) with experience in working with HIV-infected individuals. All interviews took place in isiXhosa in private rooms at the facility. The instruments used for the quantitative interviews underwent pilot-testing prior to being finalised.

The selection criteria for client study participants were:

- Attending a selected HIV care, family planning or STI clinic. Participants recruited from HIV care services had to have had been diagnosed HIV-infected at least 3 months prior to the interview.
- Aged 14 or older (Age at which minors are allowed to consent to medical treatment without parental consent. There are no age restrictions on access to HIV care, family planning and STI services in South Africa), and
- Willing to participate in the research and give written consent.

Semi-structured interviews with health care providers

Structured interviews were conducted with primary care nurses working at participating facilities. All providers who provided family planning, STI or HIV care services at the selected facilities were interviewed. These interviews lasted approximately 30-45 minutes and were administered in a private room at each facility by the study coordinator in the provider's home language (usually isiXhosa). The selection criteria for provider study participants were:

- Currently employed as a health provider at a selected HIV care, family planning or STI clinic
- Aged 18 or older, and
- Willing to participate in the research and give written consent.

Data analysis

Quantitative data was entered into custom-designed Microsoft Access templates by a data entry clerk. Data analysis was conducted using the statistical programme STATA. Descriptive statistics were employed for basic characterization of variables and to assist in data cleaning. Bivariate comparisons (using Student's t-test and ANOVA to compare means, Wilcoxon rank-sum and Kruskal-Wallis tests to compare medians, and Yates' corrected chi-square and Fisher's Exact tests to compare proportions) were used to identify basic associations.

Ethical conduct

Ethical approval was obtained from the Research Ethics Committee of the Faculty of Health Sciences at the University of Cape Town. Permission to work in the clinics was obtained from the relevant local and provincial health services.

Study personnel obtained individual written informed consent from client and health care providers prior to their involvement in data collection. The informed consent was translated into the local language and explained:

- the purpose of the study;
- the voluntary nature of participation;
- what was involved in participation, including the duration of the interview;
- the risks and benefits of participation;
- protection of participant privacy (ie, that all information provided would be completely confidential and would only be viewed and used by the researchers on this project, and that participants' names would not be recorded to ensure anonymity); and,

- the participant's right to decide not to participate, to refuse to answer any question, or to withdraw from the interview at any time without any penalty.

Informed consent documents are available in Appendix B.

PART 3. RESEARCH FINDINGS

The results from the quantitative component (369 interviews with clients recruited from FP/STI and HIV care and treatment services, and 27 semi-structured interviews with health care providers from these services) are presented here. Results are disaggregated by service (FP/STI versus HIV care and treatment) and province (Western Cape versus Eastern Cape), as appropriate. Results from the focus group discussions, which were used to design the instruments for the quantitative surveys, are presented in Appendix C.

3.1 Quantitative findings

3.1.1 Description of client interview sample

A total of 369 interviews with clients were conducted between April and July 2006. A breakdown of these interviews by gender, service and province is presented in Table 3.1. Overall, 74% of participants were female, and this proportion was higher in the FP/STI sample (82% of participants female) than the HIV care sample (38% of participants female).

Table 3.1: Summary of clients sampled for quantitative interviews

	Total sample N=369		Western Cape N=201		Eastern Cape N=168	
	Males	Females	Males	Females	Males	Females
All services	97	272	59	142	38	130
FP/STI services	51	230	29	112	22	118
HIV care & treatment	46	42	30	30	16	12

Among the 88 individuals sampled from HIV care and treatment services (median time since HIV diagnosis, 4.3 years; range, 1.8-9 years), 39 (44%) were receiving antiretroviral therapy (ART) at the time of the interview (median duration of ART, 1.8 years; range, 9 months-3.6 years). This proportion was similar for men and women, although 34 of those on ART (87%) were sampled from the Western Cape. Fifty-seven percent of HIV care and treatment service patients in the Western Cape were on ART compared to 18% in the Eastern Cape.

Table 3.2 describes the basic characteristics of the total sample, overall and by province and gender subgroups.

- The mean age of participants in this survey was 29 years. Overall, men surveyed were older than women (32 years versus 27 years) though these differences were driven largely by a substantial age difference between women and men in the HIV care sample (mean ages of 30 and 36 years, respectively, $p < 0.001$); the average ages of women and men were similar in the FP/STI sample (means ages, 27 vs 28 years, respectively, $p = 0.43$).
- Almost all participants (98%) spoke isiXhosa as their home language, and this was consistent across provinces, genders and services.
- The overall socioeconomic status of participants was higher in the Western Cape sample compared to the Eastern Cape sample. Levels of education, employment and formal housing were all higher in the Western Cape sample, although there were no significant differences by service or gender.
- The mean number of biological children was higher among individuals in the Eastern Cape 1.8 vs 1.4, $p < 0.001$) but did not differ significantly by gender or service. In addition, participants in the Eastern Cape did have a significantly higher average number of children for whom they were financially responsible (2.3) compared to individuals interviewed in the Western Cape (1.8) ($p = 0.05$).

Table 3.2: Demographic characteristics of clients interviewed, by province and gender

	Total sample n (%) n=369	Western Cape N=201		Eastern Cape N=168	
		Males n (%)	Females n (%)	Males n (%)	Females n (%)
Total number	369	59	142	38	130
Mean age (SD)	28.5 (8.1)	31.5 (32)	27.4 (6.9)	32.1 (8.5)	27.3 (8.6)
< 20	38 (10)	3 (5)	11 (8)	3 (8)	21 (16)
20-24	97 (26)	8 (14)	42 (30)	5 (13)	41 (32)
25-29	94 (26)	17 (29)	46 (33)	8 (21)	23 (18)
30-39	99 (27)	21 (36)	34 (24)	14 (37)	30 (23)
≥ 40	41 (11)	10 (17)	8 (6)	8 (21)	15 (12)
Currently employed	229 (65)	27 (46)	45 (33)	27 (73)	77 (63)
Highest education: median grade	10	10	11	9.5	10
< Grade 8	65 (18)	10 (17)	16 (11)	9 (24)	30 (23)
Grade 8-12	240 (66)	42 (72)	92 (66)	23 (62)	82 (63)
> Grade 12	61 (17)	6 (10)	32 (23)	5 (14)	18 (14)
Language					
isiXhosa	358 (98)	58 (100)	134 (96)	38 (100)	127 (98)
isiZulu	1 (<1)	0	0	0	1 (1)
Afrikaans	4 (1)	0	4 (3)	0	0
Other	4 (1)	0	2 (1)	0	2 (2)
Mean number of biological children (SD)	1.6 (1.5)	1.2 (1.2)	1.5 (1.2)	1.5 (1.6)	1.9 (1.9)
Mean number of children financially responsible for (SD)	2.1 (2.0)	2.0 (2.2)	1.9 (1.5)	2.1 (2.1)	2.4 (2.4)
Type of housing					
House/permanent building	64 (18)	22 (39)	29 (21)	2 (5)	11 (9)
Shack on serviced site	70 (19)	18 (32)	52 (37)	0	0
Shack on unserviced site	56 (15)	12 (21)	44 (31)	0	0
Traditional hut/rondavel	157 (43)	0	1 (1)	36 (95)	119 (92)
Council flat	19 (5)	5 (9)	14 (10.0)	0 (0)	0 (0)

The vast majority of participants reported that they were in a relationship at the time of the interview (88%, n=325) (Table 3.3). Individuals attending FP/STI services were more likely to report being in a relationship compared to individuals attending HIV care services (93% vs 75%, $p<0.001$), and women were more likely than men to report being in a relationship (92% vs 79%, respectively, $p=0.001$), though there was no systematic variation by province ($p=0.39$). Among participants in a current relationship, the majority described their relationship as non-cohabiting and not married.

Overall, approximately 38% of participants stated that they wanted to become pregnant at the time of their last pregnancy. This proportion did not differ significantly by province, gender or participant source.

Table 3.3: ART use, relationship status, intended pregnancy and contraceptive use among clients interviewed, by province, gender and service attended by patient

	Total sample	Western Cape (n=201)						Eastern Cape (n=168)					
		Males (n=59)			Females (n=142)			Males (n=38)			Females (n=130)		
		Total	HIV care N=30	FP/STI N=29	Total	HIV care N=30	FP/STI N=112	Total	HIV care N=16	FP/STI N=22	Total	HIV care N=12	FP/STI N=118
Currently receiving ART	39 (11)	18 (31)	18 (60)	--	16 (11)	16 (53)	--	2 (5)	2 (11)	--	3 (2)	3 (16)	--
Currently in relationship	325 (88)	48 (81)	20 (67)	28 (97)	125 (89)	25 (83)	100 (91)	29 (76)	11 (69)	18 (82)	122 (94)	10 (83)	112 (95)
Relationship status													
Married/Co-habiting	146 (43)	22 (44)	10 (46)	12 (43)	63 (49)	18 (67)	45 (44)	14 (45)	8 (67)	6 (32)	47 (38)	6 (55)	41 (36)
Non-cohabiting relationship	181 (54)	26 (52)	10 (46)	16 (57)	64 (50)	8 (30)	56 (55)	15 (48)	3 (25)	12 (63)	75 (60)	4 (36)	71 (62)
No relationship	9 (3)	2 (4)	2 (9)	0	2 (2)	1 (4)	1 (1)	2 (7)	1 (8)	1 (5)	3 (2)	1 (9)	2 (2)
Last time you were or your partner was pregnant, did you want to have a child then, or wait to have a child later, or did you not want to have a child at all?													
Never been pregnant	26 (9)	4 (10)	3 (13)	1 (5)	5 (4)	4 (15)	1 (1)	1 (4)	0 (0)	1 (8)	16 (14)	0	16 (15)
Then	115 (38)	21 (50)	12 (57)	9 (47)	47 (41)	13 (48)	34 (39)	16 (55)	9 (56)	7 (54)	31 (26)	4 (36)	27 (25)
Later	121 (40)	13 (31)	6 (26)	7 (37)	7 (26)	47 (53)	54 (47)	6 (21)	4 (25)	2 (15)	47 (40)	2 (18)	45 (42)
No (more)	40 (13)	4 (10)	2 (9)	2 (11)	8 (7)	3 (11)	5 (6)	4 (14)	2 (13)	2 (15)	24 (30)	5 (46)	19 (18)
Don't know	3 (1)	0	0	0	1 (1)	0	1 (1)	2 (7)	1 (6)	1 (8)	0	0	0
Current use of contraception method to prevent pregnancy by participant or partner													
Any method [1]	302 (82)	41 (69)	20 (67)	21 (72)	130 (92)	29 (97)	101 (90)	21 (55)	8 (50)	13 (59)	110 (85)	9 (75)	101 (86)
Oral contraceptive pill	20 (7)	1 (2)	0	1 (5)	6 (5)	0	6 (6)	1 (5)	0	1 (8)	12 (11)	1 (11)	11 (11)
3-month injectable	141 (47)	8 (20)	5 (25)	3 (14)	82 (63)	16 (55)	66 (65)	3 (14)	2 (25)	1 (8)	48 (44)	1 (11)	47 (47)
2-month injectable	59 (50)	6 (15)	1 (5)	5 (24)	18 (14)	1 (3)	17 (17)	0	0	0	35 (32)	0	35 (35)
IUD	0	0	0	0	0	0	0	0	0	0	0	0	0
Female sterilization	5 (2)	0	0	0	3 (2)	1 (3)	2 (2)	0	0	0	2 (2)	0	2 (2)
Male sterilization	5 (2)	2 (5)	1 (5)	1 (5)	1 (1)	1 (4)	0	0	0	0	2 (2)	0	2 (2)
Male condom	198 (65)	37 (90)	19 (95)	18 (86)	85 (65)	23 (79)	62 (61)	21 (100)	8 (100)	13 (100)	55 (50)	9 (100)	46 (46)
Female condom	12 (4)	0	0	0	7 (5)	2 (7)	5 (5)	3 (14)	1 (12)	2 (15)	2 (2)	0	2 (2)
Any hormonal method	224 (61)	16 (27)	7 (23)	9 (31)	107 (75)	18 (60)	89 (79)	4 (11)	2 (13)	2 (9)	97 (75)	2 (17)	95 (81)
Any non-barrier method	230 (62)	17 (29)	7 (23)	10 (34)	110 (77)	19 (63)	91 (81)	4 (11)	2 (13)	2 (9)	99 (76)	2 (17)	97 (82)
Any barrier method	201 (54)	37 (63)	19 (63)	18 (62)	88 (62)	24 (80)	64 (57)	21 (55)	8 (50)	13 (59)	55 (42)	9 (75)	46 (39)

1. Note that participants could report using more than one method. The denominator for the percentage of participants reporting any method use and categories of method used (hormonal, non-barrier and barrier) is the total number of participants; for specific types of methods used, the denominator is the number of individuals reporting any method use.

3.1.2 Contraceptive knowledge and use

Eighty-two percent of all participants reported that they or their partner were currently using some form of contraception at the time of the interview (Table 3.3). This percentage was higher among women (88%) than men (64%) ($p < 0.001$), among individuals in the Western Cape (85%) compared to the Eastern Cape (78%) ($p = 0.08$) and individuals attending FP/STI services (84%) compared to HIV care and treatment services (75%) ($p = 0.06$).

Hormonal methods (including depot medroxyprogesterone acetate [the 3-monthly injectable, DMPA/Petogen], norethindrone enanthate [the 2-monthly injectable, NET-EN/Nuristerate] and combined oral contraceptive pills) and male condoms were the most commonly used forms of contraception. The median duration of use of the most common methods, as reported by female participants, is shown in Table 3.4: while most women using hormonal methods had used these for a median period of between 1-2 years, women reported male condom use for contraception over a median of 5 years. The numbers of individuals reporting female or male sterilization, female condom use, or use of intrauterine devices were small.

Table 3.4 Median duration of use for major contraceptive methods (reported by women only)

<i>Contraception Type</i>	<i>Median time (months)</i>	<i>Interquartile range</i>	<i>Range</i>
Oral contraceptive pill	24	12-72	12-84
3-month injectable 'depo'	24	12-48	12-312
2-month injectable 'nuristerate'	12	12-36	12-60
Male condom	60	24-96	24-96

Knowledge and use of emergency contraception (EC) was very low. Among FP/STI clients, 12% ($n = 32$) had ever heard of emergency contraception, 4% ($n = 11$) had ever been told about EC by a healthcare provider and 1% ($n = 3$) had used EC in past 12 months. Among clients from HIV services, 12% ($n = 10$) had ever heard of EC, 6% ($n = 5$) had ever been told about EC by a healthcare provider and 2% ($n = 2$) had used EC since HIV diagnosis.

In an analysis restricted to individuals attending HIV care and treatment services (Table 3.5), slightly less than one-quarter of participants reported having stopped using a contraceptive method since their HIV diagnosis. This proportion was higher among females than males (38% vs 9% among males, $p = 0.001$), and was highest among women in the Eastern Cape (67% of whom stopped, compared to 27% of women interviewed in the Western Cape, $p = 0.02$). The methods that were most commonly stopped were the 3-month injectable (11 individuals reporting stoppage) and the combined oral contraceptive pill (5 individuals reporting stoppage). Sixty-five percent of HIV-infected individuals ($n = 56$) reported starting a contraceptive method since their HIV diagnosis; the vast majority of these ($n = 53$) reported starting to use the male condom.

Table 3.5: Initiation and discontinuation* of contraceptive methods since HIV diagnosis among women and men interviewed at HIV care and treatment services

	Total sample N=86	Western Cape		Eastern Cape	
		Males	Females	Males	Females
<u>Stopped</u> contraceptive method since HIV+ diagnosis	20 (23)	3 (11)	8 (27)	1 (6)	8 (67)
<u>Started</u> contraceptive method since HIV+ diagnosis	56 (65)	18 (62)	21 (72)	8 (50)	9 (75)

*Indicates discontinuation of contraception.

Table 3.5a: Sexual behaviour, and condom and contraceptive use since HIV diagnosis among women and men interviewed at HIV care and treatment services

	Total sample N=66	Western Cape N=46		Eastern Cape N=20	
		Males	Females	Males	Females
Had sexual intercourse without using a method of contraception since HIV diagnosis, among those who have had sexual intercourse	22 (33)	5 (25)	6 (23)	3 (27)	8 (89)
Had sexual intercourse without using a condom since HIV diagnosis, among those who have had sexual intercourse	27 (43)	7 (35)	12 (50)	4 (40)	4 (44)
Total number of sexual partners since HIV diagnosis					
0	19 (22)	10 (33)	3 (10)	3 (21)	3 (25)
1	51 (60)	11 (37)	25 (86)	6 (43)	9 (75)
2	6 (7)	4 (13)	0	2 (14)	0
3	5 (6)	2 (7)	1 (3)	2 (14)	0
4	4 (5)	3 (10)	0	1 (7)	0

Table 3.5b: Sexual behaviour, and condom and contraceptive use since ARV initiation among women and men interviewed at HIV care and treatment services

	Total sample N=31
Had sexual intercourse without using a method of contraception since HIV diagnosis	1 (3)
Had sexual intercourse without using a condom since HIV diagnosis	3 (10)
Total number of sexual partners since HIV diagnosis	N=38
0	8 (22)
1	26 (72)
2	1 (3)
3	1 (3)

Table 3.6: Sexual activity, condom use and dual method use among clients interviewed, by province, gender and service attended by patient

	Western Cape (n=201)						Eastern Cape (n=168)					
	Males (n=59)			Females (n=142)			Males (n=38)			Females (n=130)		
	Total	HIV care	FP/STI	Total	HIV care	FP/STI	Total	HIV care	FP/STI	Total	HIV care	FP/STI
Sexual intercourse in the past 6 months	308 (83)	19 (63)	27 (93)	128 (90)	25 (83)	103 (92)	27 (71)	8 (50)	19 (86)	107 (82)	9 (75)	98 (83)
Sexual intercourse in the past month	259 (70)	18 (60)	27 (100)	113 (80)	23 (77)	90 (80)	19 (50)	5 (31)	14 (64)	82 (63)	6 (97)	76 (64)
Frequency of sexual intercourse in the last month [1]												
None or only 1 time	25 (10)	2 (11)	2 (7)	6 (5)	1 (4)	5 (6)	2 (11)	1 (20)	1 (7)	13 (16)	1 (17)	12 (16)
2-10 times	207 (80)	15 (83)	23 (86)	97 (86)	19 (83)	78 (87)	12 (63)	4 (80)	8 (57)	60 (73)	5 (83)	55 (72)
More than 10 times	27 (10)	1 (6)	2 (7)	10 (9)	3 (13)	7 (8)	5 (26)	0	5 (36)	9 (11)	0	9 (12)
HIV status of last sexual partner												
HIV-Positive	37 (10)	12 (53)	3 (10)	15 (11)	9 (30)	6 (5)	4 (11)	3 (19)	1 (5)	3 (2)	1 (8)	2 (2)
HIV-Negative	72 (20)	2 (7)	6 (21)	42 (30)	7 (23)	35 (31)	3 (8)	1 (6)	2 (9)	19 (15)	2 (17)	17 (14)
Unknown	620 (70)	16 (40)	20 (69)	85 (60)	14 (47)	71 (63)	31 (81)	12 (75)	19 (86)	108 (83)	9 (75)	99 (84)
Condom use at last sexual intercourse	171 (46)	18 (60)	12 (41)	77 (54)	22 (73)	55 (49)	14 (37)	8 (50)	6 (27)	50 (38)	9 (75)	41 (35)
Consistency of condom use in past 6 months [2]												
Always (100%)	107 (34)	17 (85)	5 (18)	44 (34)	17 (63)	27 (26)	9 (32)	4 (50)	5 (25)	32 (29)	6 (75)	26 (25)
Most times	40 (13)	1 (5)	4 (14)	21 (16)	4 (15)	17 (16)	5 (18)	1 (13)	4 (20)	9 (8)	2 (25)	7 (7)
Sometimes (50%)	32 (10)	1 (5)	10 (36)	9 (7)	3 (11)	6 (6)	5 (18)	1 (13)	4 (20)	7 (6)	0	7 (7)
Rarely	21 (7)	1 (5)	1 (4)	12 (9)	0	12 (12)	2 (7)	1 (13)	1 (5)	5 (5)	0	5 (5)
Never (0%)	118 (37)	0	8 (29)	45 (34)	3 (11)	42 (40)	7 (25)	1 (13)	6 (30)	58 (52)	0	58 (56)
Dual method use in past 6 months [2]												
Consistent condom use with non-barrier method	70 (22)	5 (26)	2 (7)	36 (27)	12 (46)	24 (23)	2 (7)	1 (13)	1 (5)	25 (23)	1 (11)	24 (24)
Inconsistent condom use with non-barrier method	133 (42)	2 (11)	8 (29)	67 (51)	4 (15)	63 (59)	2 (7)	1 (13)	1 (5)	54 (50)	0	54 (55)
Non-barrier method only	34 (11)	11 (58)	3 (11)	8 (6)	5 (19)	3 (3)	6 (21)	3 (38)	3 (15)	6 (6)	5 (56)	1 (1)
No condom or non-barrier method used	77 (25)	1 (5)	15 (54)	21 (16)	5 (19)	16 (15)	18 (64)	3 (38)	15 (75)	22 (21)	3 (33)	19 (19)

1. The denominator for this percentage is individuals who reported sexual intercourse in the past month
2. The denominator for this percentage is individuals who reported sexual intercourse in the 6 months

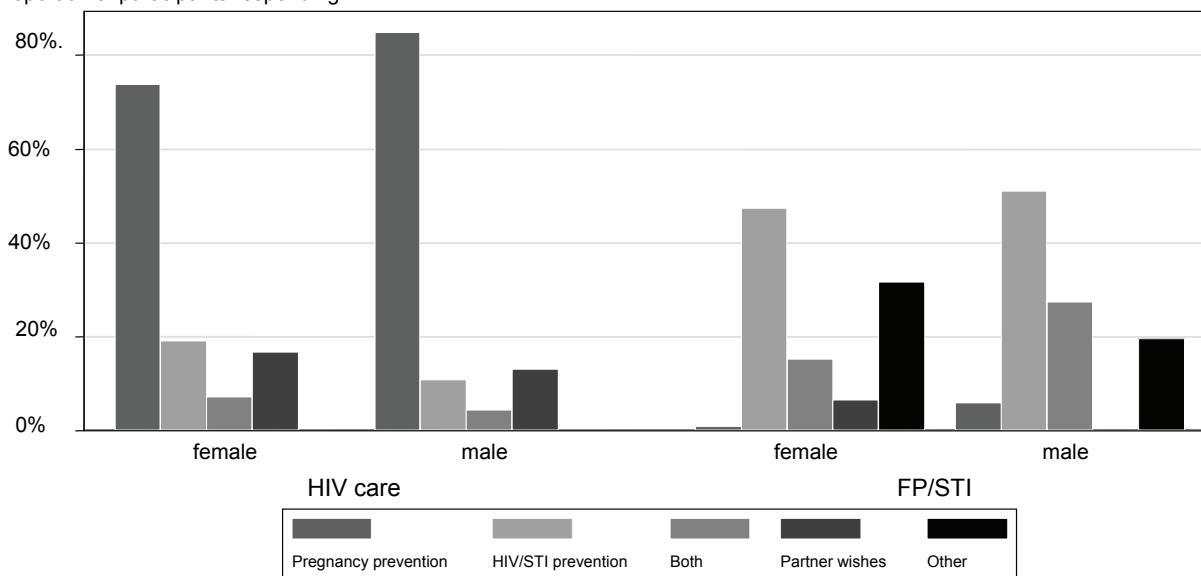
Levels of sexual activity in the sample were high, with 85% of participants reporting sexual intercourse in the six months prior to being interviewed and 70% reporting sexual intercourse in the month prior to being interviewed. Individuals in FP/STI services were significantly more likely to report sex in the past 6 months than individuals from HIV care services (after adjusting for age, province, and gender, OR: 2.84; 95% CI: 1.44-2.59, $p < 0.01$). Among those who reported sexual intercourse in the past month, 80% estimated that they had sex 2-10 times during this period. Participants sampled from HIV care and treatment services were more likely to know the HIV status of their partners, and more likely to have sex with an HIV-infected partner, than individuals from FP/STI services ($p < 0.001$ for both associations). However, knowledge of partner's HIV status was generally very low in all samples.

3.1.3 Condom use: prevalence, reasons and correlates

Condom use was examined over two reference periods: consistent condom use over the six months before being interviewed and condom use at last sexual intercourse (regardless of when this took place). Overall, 34% of participants who were sexually active in the past six months reported consistent condom use during that period. This estimate was much higher among participants from HIV care and treatment services (70%) than FP/STI services (25%). This difference remained highly significant after adjusting for participant age, sex and province (OR: 7.06; 95% CI: 3.84-12.97, $p < 0.001$). Paralleling this, condom use at last sexual intercourse was reported among 46% of participants overall, and was significantly higher among individuals sampled from HIV care and treatment services compared to individuals from FP/STI services (after adjusting for age, sex and province, OR: 3.55; 95% CI: 1.98-6.37, $p < 0.001$).

Figure 3.1 Reasons given by participant as the most important justification for condom use, by source of participant and gender.

Proportion of participants responding



When asked what the most important reasons that they or other people like them should use condoms, 148 (40%) participants cited only HIV or STI prevention; approximately half as many (20%, $n=75$) cited only pregnancy prevention, and dual protection was cited by only 15% of participants ($n=54$). The breakdown of reasons by participant source and sex is shown in Figure 3.1. Overall, pregnancy prevention was the reason most commonly cited for condom use among individuals sampled from HIV care services (mentioned by approximately 80% of participants), while HIV/STI prevention was most commonly cited by participants in FP/STI services (mentioned by approximately 48% of participants). Within each service, there were no significant variations in the reasons for condom use between men and women, and these reasons did not differ markedly by province or participant age (not shown).

Table 3.7 shows the independent associations between individual characteristics and participants' condom use at last sexual intercourse. In the model including women and men, condom use at last sex was significantly associated with sampling from HIV care and treatment services and being in a relationship.

In addition, condom use at last sex was inversely associated with location in the Eastern Cape and use of hormonal methods (primarily DMPA, see above), but was not associated with participant age or gender. These results persisted when the models were limited to only male, or only female participants, although the confidence intervals around the resulting odds ratios broadened with the restricted sample sizes. Note that this analysis was repeated for consistent condom use during the previous six months; the results are highly consistent with condom use at last sex, and thus are not shown.

Table 3.7. Results of multiple logistic regression models predicting odds ratios for condom use at last sexual intercourse by selected participants characteristics, overall and by participant gender

	All participants		Men only		Women only	
	OR	95% CI	OR	95% CI	OR	95% CI
Age (continuous)	0.99	0.95-1.02	0.95	0.87-1.03	1.00	0.96-1.03
Province: Eastern Cape	0.61	0.39-0.98	0.91	0.31-2.69	0.60	0.35-1.00
Source: FP/STI	1.0	(reference)	1.0	(reference)	1.0	(reference)
HIV care, not on ART	6.35	2.85-14.14	8.32	2.08-33.24	6.49	2.21-19.04
HIV care, on ART	6.85	2.67-17.56	12.47	1.90-81.93	6.45	1.83-22.60
Not currently using non-barrier method	2.27	1.28-4.01	3.98	1.05-15.09	1.94	1.01-3.73
Current relationship status: None	1.0	(reference)	1.0	(reference)	1.0	(reference)
Married/cohabiting	4.82	1.81-12.80	10.31	1.57-67.85	2.76	0.85-9.00
Non-cohabiting relationship	9.38	3.66-24.08	20.06	3.44-117.00	5.63	1.84-17.21
Male gender	1.04	0.56-1.96	--	--	--	--

In an analysis restricted to individuals sampled from HIV care and treatment, those receiving ART were more likely to report condom use than those not on ART, both at last sex (49% vs 35%, $p=0.265$) and consistent use in the past 6 months (57% vs 36%, $p=0.031$). However these differences did not persist in the full model ($p=0.194$).

3.1.4 Dual method use: prevalence and correlates

See tables 3.3 and 3.6. Dual method use was defined as combined condom and non-barrier method use at last sexual intercourse or during the past 6 months (based on consistent condom use during the 6-month reference period). Overall, 115 respondents (31% of all 369 respondents) reported dual method use at last sexual intercourse and 22% reported dual method use in the preceding 6 months (70 of 308 individuals sexually active in the previous 6 months). Dual method use occurred most commonly with the combination of a male condom and a hormonal method, accounting for 98% of individuals reporting dual method use at last sexual intercourse; the injectables and the combined oral contraception accounted for 64%, 24% and 10% of non-barrier methods used, respectively. The prevalence of dual method use at last sex, and during the past 6 months, according to participant characteristics, is shown in Figure 3.2 (a) and (b).

Slightly different trends in prevalence were observed for dual method use at last sex compared to dual method use in the previous 6 months. For dual method use at last sex, levels were similar between HIV care and FP/STI samples in the Western Cape, and women were more likely to report dual method use in all subgroups. The distributions were more heterogeneous for dual method use in the previous 6 months, with lower levels observed among FP/STI patients and slightly more men than women reporting dual method use among HIV care and treatment patients in the Eastern Cape.

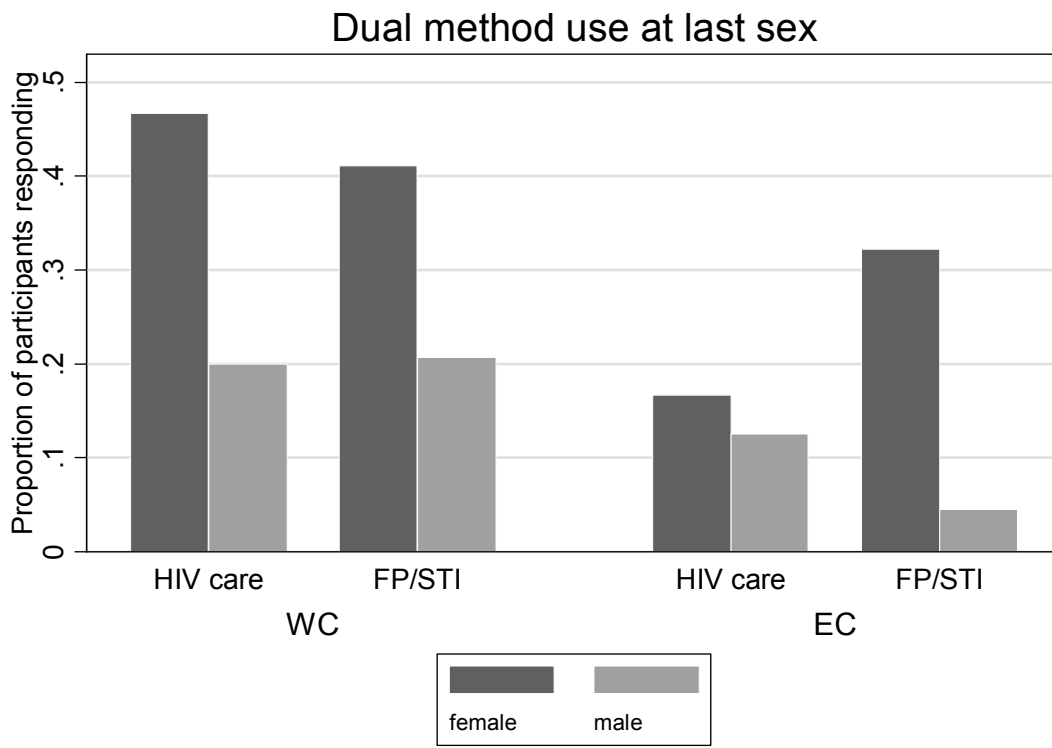
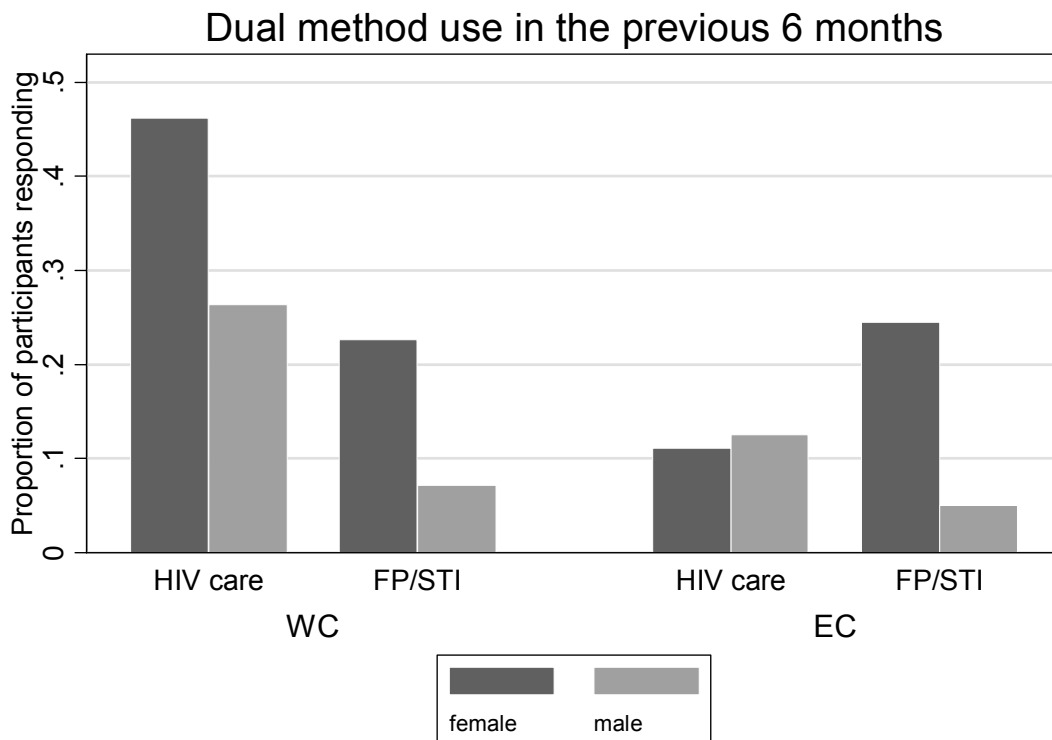


Figure 3.2 (b). Prevalence of dual method use in the previous 6 months according to participant source, province and gender



The factors associated with dual method use in the overall sample during each reference period are presented in Table 3.8. Individuals reporting dual method use tended to be younger, on average, than individuals not reporting dual method use, although this was only statistically significant for dual method use at last sexual intercourse. Women were significantly more likely to report dual method use for both reference periods, and dual method use was more likely among individuals in the Western Cape, although there was no clear difference in the prevalence of dual method use by the source of the patient (HIV care and treatment versus FP/STI).

Among individuals sampled from HIV care and treatment services, those receiving ART were significantly more likely to report dual method use both at last sex and during the previous 6 months (crude OR and 95% CI: 2.78, 1.05-7.32 and 5.23, 1.58-17.32, respectively). The distribution of non-barrier contraception methods used was similar among dual method users and non-users. Relationship status varied significantly with dual method use, with individuals in a non-cohabiting relationship more likely, and individuals in a cohabiting relationship less likely, to report dual method use.

Table 3.8. Unadjusted associations involving dual method use at last sexual intercourse, and dual method use in the past six months, in the full sample of participants.

	Dual method use at last sex			Dual method use in past 6 months		
	Yes N=115	No N=254	p-value	Yes N=70	No N=244	p-value
Mean age	27.1	29.1	0.03	27.2	28.1	0.42
Median education (grade)	10	10	0.57	10	11	0.51
Gender:						
Female	100 (37)	172 (63)	<0.001	61 (26)	178 (74)	0.02
Male	15 (15)	82 (85)		9 (12)	66 (78)	
Province						
Western Cape	72 (36)	129 (64)	0.04	43 (24)	136 (76)	0.41
Eastern Cape	43 (26)	125 (74)		27 (20)	108 (80)	
Patient source						
HIV care	24 (27)	64 (73)	0.43	19 (31)	43 (69)	0.08
FP/STI	91 (32)	190 (68)		51 (20)	201 (80)	
ART use [1]						
Not on ART	9 (18)	40 (82)	0.05	5 (15)	28 (85)	0.01
On ART	15 (39)	24 (61)		14 (48)	15 (52)	
Non barrier method used						
Oral contraceptive pill	11 (55)	9 (45)	0.60	4 (25)	12 (75)	0.09
3-month injectable	72 (51)	69 (49)		45 (36)	79 (64)	
2-month injectable	28 (47)	31 (53)		17 (32)	36 (68)	
IUD	0	0		0	0	
Female sterilization	1 (20)	4 (80)		0	5 (100)	
Male sterilization	3 (60)	2 (40)		4 (80)	1 (20)	
Current relationship status						
None	5 (12)	37 (88)	<0.01	1 (7)	14 (93)	0.06
Married/cohabiting	24 (26)	69 (74)		13 (16)	69 (84)	
Non-cohabiting relationship	86 (37)	148 (63)		56 (26)	161 (74)	

1. This analysis is restricted to the HIV care sample only.

When the crude associations involving dual method use at last sex were examined in a multivariate model (Table 3.9), the inverse association with male gender persisted. In addition, individuals sampled from the Eastern Cape remained significantly less likely to report dual method use compared to those from the Western Cape. Individuals on ART were more likely to report dual method use than individuals from FP/STI services, although this was strongest among men. Individuals who were not cohabiting were more likely to report dual method use than those not in a relationship or in cohabiting/marital relationships.

Table 3.9. Results of multiple logistic regression models predicting odds ratios for dual method use at last sexual intercourse by selected participants characteristics, overall and by participant gender

	All participants		Men only		Women only	
	OR	95% CI	OR	95% CI	OR	95% CI
Age (continuous)	0.98	0.95-1.02	0.91	0.81-1.01	0.99	0.96-1.03
Province: Eastern Cape	0.58	0.36-0.95	0.55	0.13-2.43	0.62	0.37-1.03
Source: FP/STI	1.0	(reference)	1.0	(reference)	1.0	(reference)
HIV care, not on ART	0.54	0.37-1.95	1.22	0.19-7.72	0.94	0.35-2.47
HIV care, on ART	2.06	0.90-4.71	7.72	1.31-45.47	1.42	0.52-3.84
Current relationship status: Single	1.0	(reference)	1.0	(reference)	1.0	(reference)
Married/cohabiting	2.71	0.92-8.02	*	*	1.54	0.49-4.86
Non-cohabiting relationship	3.74	1.35-10.35	*	*	2.84	0.98-8.21
Male gender	0.31	0.16-0.60	--	--	--	--

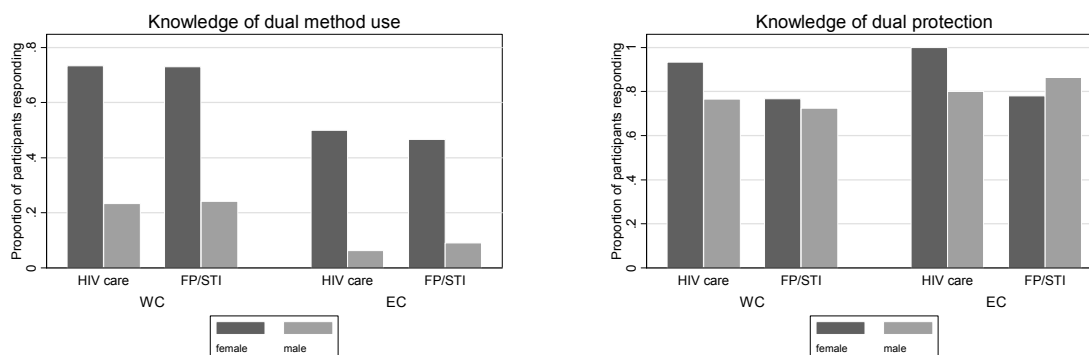
* These parameters could not be estimated due to low numbers of male participants reporting no relationship.

In a model predicting the odds of dual method use in the past 6 months containing all the covariates shown in Table 3.9, the association between dual method use and ART use became stronger. Compared to women and men from FP/STI services, those sampled from HIV care who were not on ART had a similar odds of dual method use (OR: 1.12; 95% CI: 0.39-3.22), but individuals who were taking ART were more than five times as likely to report dual method use (OR: 5.81; 95% CI: 2.26-14.88).

3.1.5 Knowledge of dual method use and dual protection

Overall, 49% of participants (n=181) had heard of dual method use (defined for participants as “use of a condom at the same time as another form of contraception”) and 80% (n=293) had heard of dual protection (defined for participants as “using a condom to both prevent pregnancy and prevent against HIV or another STI”).

Figure 3.3. Levels of knowledge of dual protection and dual method use, by participant gender, province and source.



Levels of knowledge of dual method use, and dual protection, are shown by participant gender, province and source in Figure 3.3. Female participants were consistently more likely than men to be familiar with the concept of dual method use (OR: 7.21; 95% CI: 4.05-12.85), and participants from the Eastern Cape were less likely to have heard of dual method use compared to those from the Western Cape (OR: 0.43; 95% CI: 0.29-0.66). However individuals from FP/STI services were not more likely to have heard of dual protection than individuals from HIV care and treatment services. Levels of knowledge of dual protection were consistently high across all subgroups.

Table 3.10. Unadjusted associations involving knowledge of dual method use, and knowledge of dual protection, in the full sample of participants

	Knowledge of dual method use			Knowledge of dual protection		
	Yes N=181	No N=187	p-value	Yes N=293	No N=75	p-value
Mean age	27.2	29.6	<0.01	28.3	28.9	0.57
Median education (grade)	11	10	0.001	10	10	0.22
Gender						
Female	164 (61)	107 (39)	<0.001	218 (80)	54 (20)	0.66
Male	17 (18)	80 (82)		75 (20)	21 (80)	
Province						
Western Cape	117 (59)	83 (41)	<0.001	158 (79)	43 (21)	0.61
Eastern Cape	64 (38)	104 (62)		135 (81)	32 (19)	
Patient source						
HIV care	36 (41)	52 (59)	0.09	75 (86)	12 (14)	0.09
FP/STI	145 (52)	125 (48)		218 (76)	63 (24)	
ART use [1]						
Not on ART	19 (39)	30 (61)	0.67	41 (85)	7 (15)	0.87
On ART	17 (44)	22 (56)		34 (87)	5 (13)	
Non barrier method used						
Oral contraceptive pill	15 (75)	5 (25)	0.65	20 (100)	0	0.001
3-month injectable	90 (64)	50 (36)		113 (80)	28 (20)	
2-month injectable	39 (66)	20 (34)		47 (80)	12 (20)	
IUD	0	0		0	0	
Female sterilization	2 (40)	3 (60)		1 (20)	4 (80)	
Male sterilization	4 (80)	1 (20)		5 (100)	0	
Current relationship status						
None	14 (34)	27 (66)	0.05	26 (62)	16 (38)	0.01
Married/cohabiting	42 (45)	51 (55)		73 (79)	19 (21)	
Non-cohabiting relationship	125 (53)	109 (47)		194 (83)	40 (17)	

1. This analysis is restricted to the HIV care sample only.

In crude analyses (Table 3.10), knowledge of dual method use was significantly higher among participants who were younger, had a higher level of education, were female, and who were in a non-cohabiting relationship. There were fewer factors associated with knowledge of dual protection, although individuals in a non-cohabiting relationship were more likely to know the concept of dual protection, and individuals who knew of dual protection had a slightly different distribution of non-barrier contraceptive use (driven primarily by differences in oral contraceptive use). In addition, there were no significant associations involving the source of the participant, or the use of ART (among participants sampled from HIV care and treatment services).

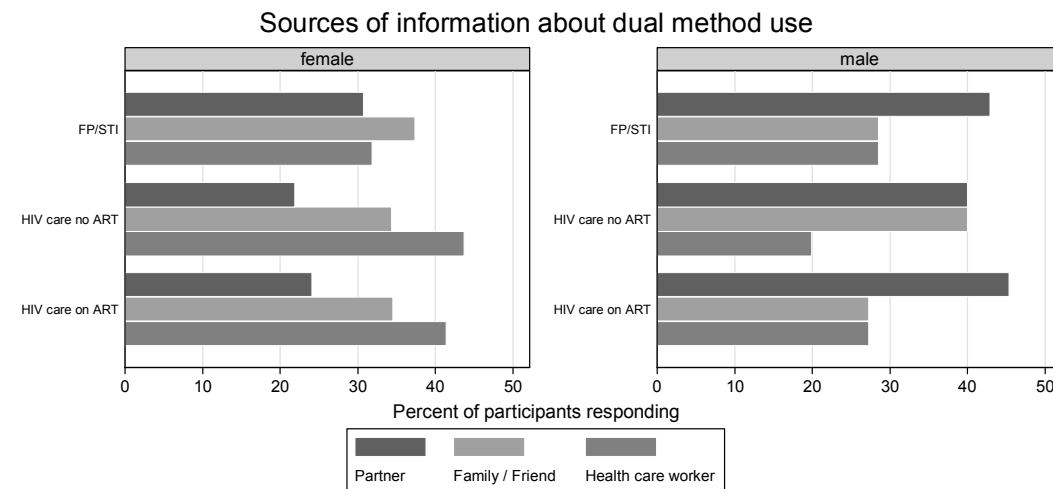
Separate logistic regression models predicting knowledge of dual method use and knowledge of dual protection are shown in Table 3.11. In this adjusted analysis, knowledge of dual method use was associated with increased education only (OR for a 1-grade increase in education, 1.12; 95% CI: 1.03-1.22). In the model predicting the odds of knowledge of dual protection, the source of the patient became a significant predictor, with individuals in HIV care not on ART, and those in HIV care on ART, both more likely to know of dual protection compared to individuals from FP/STI services. In addition, individuals who were in a relationship (married/cohabiting or non-cohabiting) were significantly more likely to know of dual protection, compared to individuals not in a relationship.

Table 3.11: Multiple logistic regression models predicting the relative odds of (a) knowledge of dual method use and (b) knowledge of dual protection

	(a) Knowledge of dual method use		(b) Knowledge of dual protection	
	OR	95% CI	OR	95% CI
Age (continuous)	0.99	0.96-1.03	0.99	0.95-1.03
Education (continuous)	1.12	1.03-1.22	1.02	0.93-1.12
Male gender	0.12	0.06-0.22	0.80	0.43-1.50
Province: Eastern Cape	0.35	0.21-0.57	1.29	0.75-2.22
Source: FP/STI	1.0	(reference)	1.0	(reference)
HIV care, not on ART	1.16	0.57-2.79	2.92	1.13-7.57
HIV care, on ART	1.10	0.46-2.64	3.36	1.09-10.35
Current relationship status: None	1.0	(reference)	1.0	(reference)
Married/cohabiting	1.54	0.63-3.77	2.92	1.25-6.82
Non-cohabiting relationship	1.69	0.73-3.87	3.77	1.72-8.24

Participants were asked about three general sources of knowledge regarding dual method use and dual protection: sexual partners, friends and family, and health care providers. Family and friends were the most common source of information for both dual method use and dual protection, cited by 42% of participants, followed by health care workers and partners (cited by 35% and 34% of participants, respectively). There were several variations in the most common sources of information about dual method use and dual protection (Figures 3.4 (a) and (b)): most notably, men were more likely to discuss dual protection and dual method use with their partners, while women were more likely to discuss these subjects with family or friends, or health care workers. These trends were consistent across both the Western Cape and Eastern Cape provinces.

Figure 3.4 (a): Sources of information about dual method use



Graphs by sex

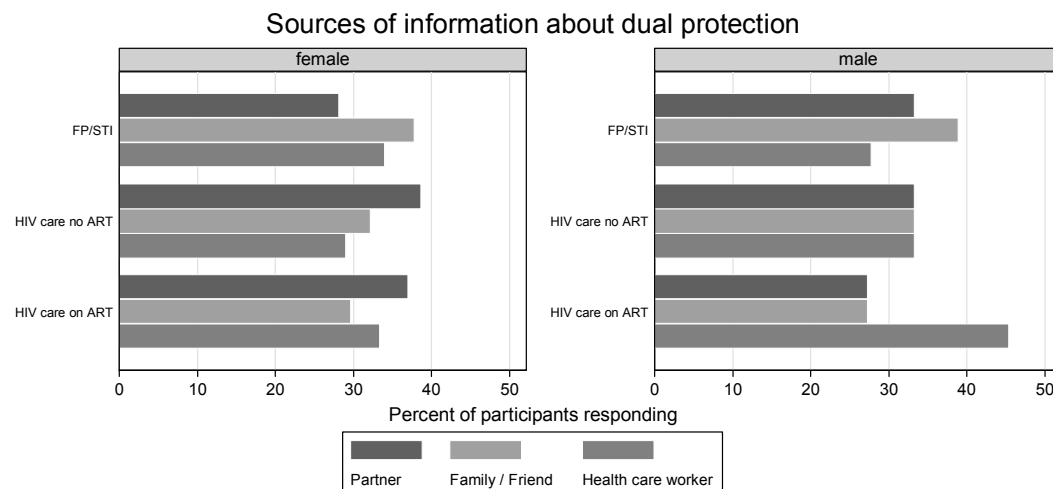


Figure 3.4 (b): Sources of information about dual protection

Graphs by sex

3.1.6 Health care provider interviews

A total of 27 interviews were conducted with health care providers between June and August 2006. A description of the sample of health care providers is presented in Table 3.12. The majority of providers interviewed were professional nurses (89%) (note that no doctors were interviewed). Half of the interviewed providers were the managers of their clinic. The majority had been working at their current facilities for less than five years, but had completed their training more than 10 years before the interview. Most had provided HIV/STI and family planning services in the six months before being interviewed.

Table 3.12: Description of health care provider sample, overall and by province

	Total sample N=27	Western Cape N=10	Eastern Cape N=17
Rank			
Prof Nurse	24 (89)	8 (80)	16 (94)
Enrolled Nurse/ staff nurse	1 (4)	1 (10)	0
Other	2 (7)	1 (10)	1 (6)
Facility manager	13 (50)	4 (40)	9 (56)
Years at facility			
1-5 years	15 (56)	6 (60)	9 (53)
6-10 years	8 (30)	3 (30)	5 (29)
More than 10 years	4 (15)	1 (10)	3 (18)
Years since basic training finished			
1-5 years	5 (19)	1 (10)	4 (24)
1-10 years	7 (26)	3 (30)	4 (24)
11-20 years	9 (33)	2 (20)	7 (41)
More than 20 years	6 (22)	4 (40)	2 (12)
Trained to provide			
Family Planning services	16 (59)	9 (90)	7 (41)
Voluntary counselling & testing for HIV	26 (96)	10 (100)	16 (94)
HIV care and treatment services	27 (100)	10 (100)	17 (100)
STI diagnosis & treatment services	22 (82)	8 (80)	14 (82)
In the last 6 months provided:			
Family Planning services	26 (96)	10 (100)	16 (94)
Voluntary counselling & testing for HIV	25 (93)	9 (90)	16 (94)
HIV care and treatment services	24 (89)	9 (90)	15 (88)
STI diagnosis & treatment services	26 (96)	9 (90)	17 (100)

When asked which are the most popular methods of family planning among clients attending their facilities, providers interviewed in both the Western and Eastern Cape province cited the injectable methods. When asked in an open-ended question why these methods were most popular, almost half (41%) providers cited reasons related to safety, efficacy, and reliability. The methods most commonly mentioned as being underused by female clients were the combined oral contraceptive pill (mentioned by 50% of all providers in each province), female condoms, and emergency contraception (Table 3.13).

	Total sample N=27	Western Cape N=10	Eastern Cape N=17
What is the most popular contraceptive method among individuals attending this clinic? [1]			
Oral contraceptive	20 (74)	4 (40)	16 (94)
Nuristerate	21 (78)	10 (100)	11 (65)
Depo/Petogen	0	0	0
IUD	0	0	0
Female sterilization	0	0	0
Male sterilization	1 (4)	0	1 (6)
Male condom	1 (4)	0	1 (6)
Female condom	0	0	0
Emergency contraception	0	0	0
What makes some contraceptive options more popular among clients than others?			
Safe, effective, reliable	12 (44)	3 (30)	9 (53)
Less side effects	2 (7)	1 (10)	1 (6)
Other	13 (48)	6 (60)	7 (41)
Are there any methods that you think could be used by more clients? [1]			
Oral contraceptive	11 (41)	5 (50)	6 (50)
Nuristerate	0	0	0
Depo/Petogen	0	0	0
IUD	0	0	0
Female sterilization	0	0	0
Male sterilization	0	0	0
Male condom	2 (7)	0	2 (17)
Female condom	7 (26)	4 (40)	3 (25)
Emergency contraception	2 (7)	1 (10)	1 (8)

1. Providers could provide more than one response to these questions.

When asked if they thought that HIV-positive women had different contraceptive needs than HIV-negative women, one-third of providers (n=9) answered yes, 11% (n=3) answered no, and 56% (n=15) did not know. Those who answered yes gave reasons related to the need for dual protection: that HIV-infected women required protection against both pregnancy and re-infection against HIV infection or other STI. When asked which methods may be most appropriate for HIV-positive women, 11/27 providers (41%) mentioned progestogen-only injectable methods, for reasons usually related to their duration of action and perceived efficacy in preventing pregnancy. Only five providers (19%) mentioned condoms as the most appropriate contraceptive method for HIV-positive women.

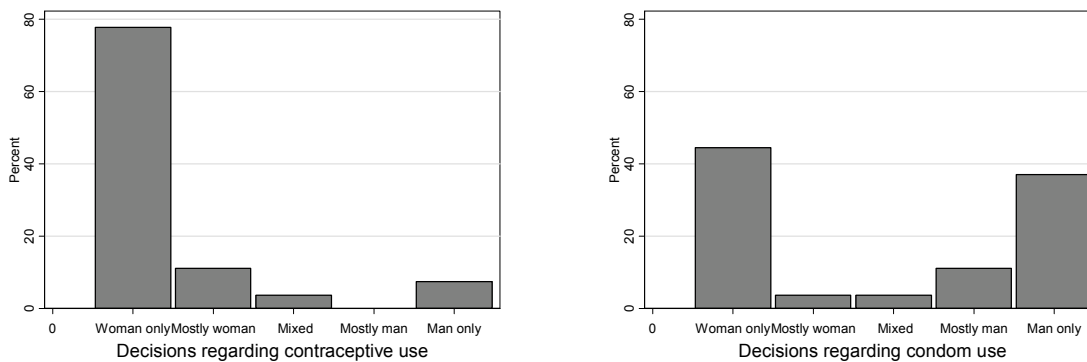
Overall, 74% of providers said that they had heard of the term “dual protection”, and of these, all correctly explained the concept (this proportion was similar in the Western Cape and Eastern Cape Province). When asked if they had ever heard the term “dual method use”, 85% of providers stated yes, and all of these correctly explained the concept. Two-thirds of providers said they thought that condoms, used alone, could be effective as contraception; however a lower proportion (44%) said they would be willing to *recommend* condoms alone as a method of contraception (Table 3.14).

	Total sample N=27	Western Cape N=10	Eastern Cape N=17
Have you ever heard of “dual protection”?	20 (74)	7 (70)	13 (76)
<i>Described concept correctly</i>	20 (100)	7 (100)	13 (100)
Have you ever heard of “dual method use”?	23 (83)	8 (80)	15 (88)
<i>Described concept correctly</i>	23 (100)	8 (100)	15 (100)
Do you think that condoms used alone are effective in preventing both pregnancy and infection?	17 (63)	8 (80)	9 (53)
Would you ever suggest to a client using a condom as their only method of contraception?	12 (44)	4 (40)	8 (47)
Do you think condoms alone are effective as contraception?	17 (63)	5 (50)	12 (71)

Providers’ perceptions about and attitudes towards different aspects of dual protection and dual method use are described in Table 3.15. When asked why they think most of their clients use condoms, almost all providers (93%) stated that prophylaxis against HIV or other STI was a main reason. Other reasons, including protection against unwanted pregnancy and partner desires, featured less prominently. Importantly, only a small fraction of those interviewed said that they think clients use condoms for dual protection. Providers’ perceptions of clients’ problems with condom use were more varied, and included problems of access (mentioned by 59% of providers), perceived lack of need (mentioned by 33% of providers) and difficulty in negotiating use (mentioned by 41% of providers).

Most providers felt that in their clients decisions to use contraception, women played the principle role in decision making (Figure 3.5). In contrast to this, there were more mixed opinions about gender roles in decision making around condom use, with opinions regarding women’s and men’s roles equally balanced.

Figure 3.5: Providers’ perceptions of control of decisions regarding condom and contraceptive use in clients’ relationships



	Total sample N=27	Western Cape N=10	Eastern Cape N=17
What proportion of sexually active clients attending this facility do you think use <u>contraception</u> in their sexual relations?			
Few/None (0-10%)	1 (4)	0	1 (6)
Some, less than half (10-40%)	2 (7)	2 (20)	0
Some, about half (40-60%)	13 (48)	2 (20)	11 (65)
Some, more than half (60-90%)	9 (33)	4 (40)	5 (29)
Most/all (90-100%)	2 (7)	2 (20)	0
What proportion of sexually active clients attending this facility do you think use <u>condoms</u> in their sexual relations?			
Few/None (0-10%)	3 (11)	2 (20)	1 (5)
Some, less than half (10-40%)	8 (30)	4 (40)	4 (24)
Some, about half (40-60%)	15 (56)	4 (40)	11 (65)
Some, more than half (60-90%)	1 (4)	0	1 (6)
Most/all (90-100%)	0	0	0
What proportion of sexually active clients attending this facility do you think use <u>condoms plus another form of contraception</u> together in their sexual relations?			
Few/None (0-10%)	4 (15)	2 (20)	2 (12)
Some, less than half (10-40%)	14 (52)	4 (40)	10 (59)
Some, about half (40-60%)	5 (19)	3 (30)	2 (12)
Some, more than half (60-90%)	3 (11)	1 (10)	2 (12)
Most/all (90-100%)	1 (4)	0	1 (6)
What proportion of sexually active clients attending this facility do you think use <u>condoms alone for dual protection</u> in their sexual relations?			
Few/None (0-10%)	8 (30)	4 (40)	4 (24)
Some, less than half (10-40%)	12 (44)	6 (60)	6 (35)
Some, about half (40-60%)	6 (22)	0	6 (35)
Some, more than half (60-90%)	1 (4)	0	1 (6)
Most/all (90-100%)	0	0	0
For most clients at this facility, what do you think are the main reasons for using a condom during sex? [1]			
Protection against pregnancy	2 (7)	2 (20)	0
Protection against HIV/other STDs	25 (93)	10 (100)	15 (88)
Protection against both infection and pregnancy	2 (7)	1 (10)	1 (6)
Makes partner happy	1 (4)	1 (10)	0
Other	1 (4)	1 (10)	0
For most clients at this facility, what do you think are the main problems with using a condom during sex? [1]			
Difficult to get condoms	16 (59)	6 (60)	10 (59)
Condoms not comfortable for patient or their partner	2 (7)	2 (20)	0
Condoms not necessary in current relationship	9 (33)	6 (60)	3 (18)
Can not introduce condoms into relation/tell partner to use condoms	11 (41)	6 (60)	5 (29)
Other	10 (37)	6 (60)	4 (24)
For most sexually active clients attending this facility, do you think that decisions regarding contraception are made mostly by women or men?			
Female only	21 (78)	8 (80)	13 (77)
Female mostly, some male	3 (11)	2 (20)	1 (6)
Female and male	1 (4)	0	1 (6)
Mostly male, some female	0	0	0
Male only	2 (7)	0	2 (12)
For most sexually active clients attending this facility, do you think that decisions regarding condom use are made mostly by women or men?			
Female only	12 (44)	2 (20)	10 (59)
Female mostly, some male	1 (4)	1 (10)	0
Female and male	1 (4)	0	1 (6)
Mostly male, some female	3 (11)	3 (30)	0 (0)
Male only	10 (37)	4 (40)	6 (35)

1. Participants could choose more than one response for these items

PART 4. SUMMARY OF MAIN FINDINGS, DISCUSSION OF THE GENERAL CHALLENGES OF PROMOTING DUAL PROTECTION, RECOMMENDATIONS FOR FUTURE RESEARCH AND CONCLUSION

Summary of main findings

Participants in this study were recruited from family planning, sexually transmitted infection and HIV care services in one urban and one rural South African setting. Although South African and international reproductive health guidelines encourage the promotion of dual protection, little research on dual protection has been conducted in South Africa and the research that has been conducted has focused on family planning clients or condom procurers and has been conducted mostly in urban settings. [18-20] This is one of few studies on dual protection in South Africa to include an HIV-care clinic population, as well as a rural setting.

Participants were predominantly female, young and of low socio-economic status. Most participants were sexual activity with 83% having had sexual intercourse in the previous six months and 70% having had sexual intercourse in the month before the interview. Most participants had had multiple episodes of intercourse in the previous month. Participants from HIV-care services were significantly less likely to be recently sexually active than participants from STI and FP services. Reported contraceptive use was high with 88% of women and 64% of men reporting current contraceptive use. Despite high levels of current contraceptive use, almost half of participants reported that their last pregnancy was unintended at the time of conception, indicating unmet contraceptive need in this population. For ten percent of participants their last sexual partner was known to be HIV-positive; for 70% their last sexual partner's HIV status was unknown. Clearly, participants in this study are at risk of the negative consequences of sexual activity, including sexually transmitted infections and unintended pregnancy, and, thus, require dual protection in some form.

Most participants (80%) were aware that a condom could be used to prevent both STI and pregnancy; fewer participants (49%) were familiar with the concept of dual method use, that is using a condom in addition to another effective contraceptive method to prevent pregnancy and STI. Despite the high levels of risk of STIs, including HIV, in the South African population and the relatively high levels of knowledge with respect to dual protection, levels of dual protection were low among participants in this study. Overall, 34% of sexually active participants reported consistent condom use in past six months. Levels of consistent condom use varied significantly by sample. Encouragingly, 70% of participants in the HIV care sample reported consistent condom use. However, the finding that only one-quarter of STI/FP participants reported using a condom at every act of sexual intercourse in a six-month period is worrying. The main motivation for condom use differed in the two groups: the vast majority of HIV care participants suggested pregnancy prevention as a main motivation for condom use, while the most commonly mentioned reason for condom use in the STI/FP sample was STI prevention. Twenty-two percent of participants reported consistent dual method use in last six months. There was no difference in levels of dual method use between the HIV care and STI/FP samples. These findings on dual protection and dual method use prevalence are broadly consistent with the results of other studies conducted in sub-Saharan Africa. [18-21]

Our data suggest that the characteristics of dual method users and users of condoms alone differ in some respects. Consistent condom use was associated with being in HIV care, not using a hormonal method of contraception, being in a non-cohabiting sexual relationship as opposed to a cohabiting or marital relationship, and living in the more urban Western Cape Province. Among HIV care participants, being on ART was associated with increased consistent condom use. Sixty-five percent of HIV care participants reported starting to use a method since HIV diagnosis, and in most cases this method was the male condom. Consistent dual method use was associated with younger age, being in HIV care, being on ART and being in the Western Cape Province. Awareness of the concepts of dual protection and dual method use were strongly associated with these practices. Younger participants were more likely to have used

dual methods consistently compared to older participants. Given that sexual behaviours undertaken in young adult life are highly predictive of life-long behaviours, this finding is encouraging. Condom use was higher in non-cohabiting/non-marital relationships than in cohabiting/marital relationships. While this is well documented in many settings, it is worrying as many married/cohabiting individuals who are monogamous face risk of sexually transmitted infection through their partner's non-monogamous behaviour. Importantly use of another method of contraceptive protection (such as the injectable, the pill or sterilization) was inversely associated with condom use. The concepts of the dual function of condoms and of dual method use need to be better promoted, as participants in our study who were aware of the concept of dual method use were much more likely to have used dual methods at last sexual intercourse than women who were not.

Three-quarters of healthcare providers had heard of the concept of dual protection and could explain it correctly. And most (85%) were familiar with the concept of dual method use as well. However, although two thirds of providers thought that a condom could be used alone for dual protection, less than one-half (44%) said they would be willing to recommend condoms alone as a method of contraception. Most providers thought that their clients did not practice dual protection in any form. Among providers who thought that the needs of HIV-infected women differed from those of HIV-negative women, most cited greater need for dual protection among HIV-positive compared to HIV-negative women. This finding coupled with significantly higher levels of consistent condom use in the HIV-care sample compared to the FP/STI sample suggests that condom use is more heavily promoted among already infected individuals than those at risk of infection. There was a general lack of family planning training among healthcare providers in the Eastern Cape Province with only 41% of providers having been trained to provide family planning services. This lack of training has implications for the general client population, but is particularly worrying for HIV clients who may have specific contraceptive needs that's healthcare providers are unable to address.

Limitations of the study

While providing important insights into levels and predictors of condom use and dual method use among women in men in STI/FP and HIV care, these data are limited in several regards.

First, the findings of this study may not be generalizable. This survey was conducted among individuals attending public health facilities, with access to health education and condoms. Thus, awareness and practice of dual protection and dual method use may be higher in this sample compared to the general population. In addition, like most studies investigating the use of condoms and other contraceptives, this study may be subject to biases associated with the over-reporting of method use. Both of these factors would lead these results to overestimate the levels of dual method use and condom use in this population, suggesting that the frequency of dual protection in South Africa may be even lower. Also, given the relatively small sample size, we are limited in our ability to identify predictors of dual protection and dual method use knowledge and behaviours, especially in sub-groups of the sample such as men.

Finally, we did not have detailed information available on all variables of potential interest. In particular, no sexual event-specific data, such as casual or steady partner type, real or perceived STI/HIV risk, coercive or voluntary nature of sexual intercourse, and alcohol and drug use, were collected. Recent studies have shown that event-level factors are highly predictive of condom use.[22, 23] There is an emerging body of research that suggests that people make decisions about contraceptive use, including condom use, in the context of individual sexual relationships.[24, 25]

Challenges of promoting dual protection

In order for consistent dual protection to be achieved among sexually active women and men, a condom must be used during every act of vaginal and anal intercourse, regardless of whether or not another method of contraception is also used. In South Africa and internationally, although the parallel epidemics of STIs and unintended pregnancy are well-documented, "dual protection remains one of the most under-

tated and under-promoted public health practices today. [26] Findings from this study underscore this statement.

There is no single, perfect method of dual protection. For sexually active couples who are practicing penetrative vaginal or anal intercourse, consistent condom use or consistent dual method use are the only effective approaches to dual protection. However, none of the existing contraceptive and infection prevention methods on their own provide complete protection against both STIs and pregnancy. [27] Condoms, hormonal contraceptives, the intrauterine device (IUD) and surgical sterilization carry varying benefits and risks by affording different degrees of protection from unintended pregnancy and STIs. Non-barrier methods are not efficacious in preventing STIs, although they have the additional benefit of not requiring male cooperation for use. When used correctly and consistently, male and female condoms are the only contraceptive method that can prevent infection acquisition or transmission. However, they are less effective than other methods in preventing pregnancy.

Promoting condoms alone for dual protection may inadequately address pregnancy risk. Data from diverse settings show that consistent condom use (i.e., condom use at every act of intercourse) is difficult to achieve. There are several reasons for this. First, unlike other methods of contraception, condom use is sexual event-specific. [22-25, 30-32] Factors such as duration and quality of the sexual relationship, [22, 24, 25, 30, 33-36] whether it is a main or casual partner, [19-21, 37-40] substance use at the time of intercourse, and unexpected or coercive sex strongly influence whether or not condoms are used during a particular sexual event. In addition, the use of male condoms requires male cooperation and the female condom, though potentially initiated by the female partner, requires some degree of partner acceptance as well. [41] Finally, condom use in some partnerships may be highly stigmatized, as it is associated with perceptions of disease and infidelity, fear of being perceived as having multiple partners, or being unfaithful to a regular partner. The combination of these barriers may lead to a high failure rate of the condom-only approach to dual protection: among couples using male condoms as their sole contraceptive method, the proportion of women becoming pregnant in one year of typical use is about 15%; the corresponding proportion for the female condom is about 21%. [29, 42]

In light of the high prevalence of non-barrier contraceptive use in South Africa, with 59% of sexually active 15-49 year-olds reporting current use of a non-barrier contraceptive method, [43] dual method use represents an important approach to promoting dual protection. However, promoting dual-method use may inadequately address risk of sexually transmitted infections due to inconsistent condom use. Despite the unrivalled efficacy of using a condom plus another highly effective contraceptive consistently, dual-method use may not be the most effective approach to achieving dual protection for all couples, in all contexts.

Across diverse settings, women who use other methods of contraception (hormonal methods, surgical sterilization or the IUD) are less likely to use condoms consistently than women who are not using other contraceptive methods, even. [31, 35, 40, 44-52]

In addition to these challenges in achieving consistent condom use, women who opt to use an effective contraceptive along with condoms may do so because they perceive their pregnancy risk to be greater than their STI risk. Other women may have concerns about the more immediate and visible consequences of unintended pregnancy and be less worried about contracting STIs, including HIV, the possibility of which may seem more distant. Also, women intending to practice dual method use may have reduced ability to negotiate condom use with a reluctant male partner or reduced commitment to using a condom themselves when another method of birth control is being used. [53] In this context, there is growing interest in strategies to promote condom use as a single method for dual protection, with emergency contraception as a back-up for pregnancy prophylaxis in the event of condom slippage or breakage.

Directions for the future research

Research on dual protection, and dual method use in particular, remains scanty. To date, research, including this study, has focused on documenting prevalence and predictors of the practice. Moving

beyond documentation of levels and identification of risk factors to development and testing of interventions is a critical next step. The few interventions to promote dual protection and dual method use that have been undertaken have focused primarily on providing fairly complex and time-consuming sexual risk reduction counseling to individual female patients in developed country settings. Even if shown to be effective, these interventions may not be sustainable in busy, under-resourced clinic settings. No dual protection-specific interventions have been evaluated in the South African setting. Based on the findings of this study, as well as an extensive review of the dual protection literature, the following issues emerge with respect to dual protection intervention development:

1) Hybrid interventions need to address risk factors across multiple domains, including individual, dyad (with a focus on male partner involvement and partner-specific interventions), family, social relationships, and community, as all of these domains potentially influence dual method use practices.

2) In intervention development, it must be recognized that women who are using long-term, non-barrier contraception may be at particular risk of STI. Health promotion messages and counseling for dual method use, which are different from condom promotion messages, are urgently needed in this population.

3) There is a need for simple interventions around dual method use that can be used in STI, FP and HIV care services.

4) In addition to client interventions, provider-targeted interventions on dual protection and dual method use are needed. To develop appropriate provider-based interventions, research needs to be undertaken to determine what information providers need to decide how to appropriately manage a particular client: 1) how to obtain the relevant information about sexual history to determine if clients are candidates for dual protection; 2) defining target populations within the populations they service with whom dual protection should be automatically discussed (e.g., clients who engage in serial monogamy or who have multiple partners); and 3) how to assist the client in selecting the most appropriate method to achieve dual protection. Whether a condom-only or dual method approach to dual protection is appropriate and feasible depends on the individuals involved and the settings in which an approach is offered.

5) Condom use is essential for the achievement of dual protection among sexually active couples. Data from diverse settings show that consistent condom use is difficult to achieve, given the many individual, interpersonal, and gender-related barriers to condom use, as well as the negative attitudes attached to condom use because of the condom's association with STIs and decreased sexual pleasure. Thus, greater research on how to more effectively promote condoms by emphasizing aspects of condom use such as the pleasure related benefits and role of condoms in pregnancy prevention are required.

Conclusion

This cross-sectional study provides preliminary insights into the prevalence and correlates of dual method use and dual protection among South African women and men from HIV care and STI/FP services. Dual protection is low among STI/FP participants, but relatively high among HIV care participants. Such information will aid South Africa policy makers and health workers in understanding dual protection, and ultimately increasing its practice.

Dual protection among South African women and me **Focus group guide for clients attending HIV care services**

[With appropriate adaptation by FG leader for use with female and male groups]

Focus group to begin with introductions, ground rules, icebreakers

First, we want to talk about your views about contraception and condom use, in particular about HIV-positive women and men using contraception.

- As an HIV-positive person, what comes to your mind when you think about contraception?
-If protection during sex mentioned: What are you protecting from?
- As an HIV-positive person, what comes to your mind when you think about condom use?
-If protection during sex mentioned: What are you protecting from?
- What kinds of factors influence your thinking about using contraceptives?
 - i. Individual—desires, consideration for future
 - ii. Partner
 - iii. Family
 - iv. Community
 - v. Health care providers
 - vi. Religion
 - vii. Culture
- Do you think that others in your family/community share your views about contraceptive use by HIV-positive people? Why or why not?
- How do you think most people feel about contraceptive use by HIV-positive people?
 - i. Do you think the issues about contraception are the same for HIV-positive people who are young (teenagers) compared to HIV-positive people who are older (adults)? Why or why not?
 - ii. Do you think the issues about contraception are the same for HIV-positive people who have children already compared to those who do not have any children? Why or why not?
- What are the positive things that people do or say in your family/community that would encourage HIV-positive women and men to use contraceptives?
- What are the negative things that people do or say in your family/community that would discourage HIV-positive women and men from using contraceptives?
- What kinds of factors influence your thinking about using condoms?
 - i. Individual—desires, consideration for future
 - ii. Partner
 - iii. Family
 - iv. Community
 - v. Health care providers
 - vi. Religion

- Do you think that others in your family/community share your views about condom use by HIV-positive people? Why or why not?
 - i. Do you think the issues about condom use are the same for HIV-positive people who are young (teenagers) compared to HIV-positive people who are older (adults)? Why or why not?
 - ii. Do you think the issues about condom use are the same for HIV-positive people who have children already compared to those who do not have any children? Why or why not?
 - iii. Do you think the issues about condom use are the same for HIV-positive people whose sexual partner is also HIV positive compared to HIV-positive people whose sexual partner does not have HIV?
 - iv. Do you think the issues about condom use are the same for HIV-positive people who are stable, long-term relationships compared to HIV-positive people who are in short-term relationships?

- What are the positive things that people do or say in your family/community that would encourage HIV-positive women and men to use condoms?

- What are the negative things that people do or say in your family/community that would discourage HIV-positive women and men from using condoms?

- Do you think that most HIV-positive people use condoms when they have sex? Do you think most HIV-positive people ALWAYS/EVERYTIME use a condom when they have sex?

- Do you think that most HIV-positive people feel comfortable talking to their sexual partners about pregnancy and preventing pregnancy? Why or why not?

- Who in the couple should make decisions about whether or not to use contraception and which method to use?

- Do you think most men know if their sexual partner is using contraception and which method she is using?

- Do you think that most HIV-positive people talk to their partners about STDs/HIV and how to prevent it?

- Who in the couple should make decisions about whether or not to use a condom?

- Most of the time, what do you think happens if one partner wants to use a condom and the other does not? Do you think it is okay for your partner to refuse to have sex with you if he/she wants to use a condom and you do not? What about if they are married?

- How do you think most (members of the opposite sex) feel about contraception and condom use?

- How important is communication between partners in making decisions about whether or not to use condoms and contraception?

- How do you think most HIV-positive women feel about using male condoms? Female condoms?
- How do you think most (members of the opposite sex) feel and react when their partners want to use condoms?

 Next, let's discuss the different methods that are available.

- Where can people get condoms from? *Probe male and female condoms separately.*
 - i. Is it easy for women and men to get condoms?
- How do you think most women feel about using male condoms? Female condoms?
- How do you think most men feel about using male condoms? Female condoms?
- What different kinds of contraception are available locally?
- Are some of these kinds of contraception more appropriate or less appropriate for HIV-positive individuals? Which method of contraception should HIV-positive people use or not use? Why? *Probe for hormonal contraceptives, sterilization, IUDs, male vs. female condoms.*
- Do you think that most people are knowledgeable about the different contraceptive methods that are available? Men? Women?
- Which methods do you think most HIV-positive women prefer? Why?
- Which methods do you think most HIV-positive men prefer? Why?
- How do women choose their methods?
 - i. Does HIV status affect the choice of method for most people?
 - ii. If you were not aware of your HIV status do you think you would choose the same method, personally?
 - iii. Do you think HIV-positive women should get sterilized?
 - iv. Do you think women who are sterilized need to use a condom when they have sex?
 - v. Do you think that pregnant women need to use a condom when they have sex?
- Have you heard of people using a non-barrier contraceptive (like depo or the pill) and a male or female condom, together, during sex?
- Do you think that most people use contraceptives with condoms? Is this any different for HIV-positive people?
 - i. Why do you think that most people do not use contraceptives plus a condom?
 - ii. For those people who do use contraceptives and a condom together, why do you think they do?
 - 1. What influences these people to use a condom plus another method of contraception together? *Probe: personal aspects, partner issues, family & community influences.*

iii. What are the advantages and disadvantages of using contraceptives along with a condom at the same time?

- Where do you think most people hear about using contraceptives along with a condom at the same time? *Probe: health care workers, peer/social networks, partner influences*
- What role do you think that (members of the opposite sex) play in making the decision to use contraceptives along with a condom at the same time? Do you think most (members of the opposite sex) would use two methods at the same time? Why or why not?
- Do you think most health care providers talk to HIV-positive people about condom use? To men? To women? What do they say?
- Do most health care providers talk to HIV-positive people about contraceptive use? To men? To women? What do they say?
- Do most health care providers talk to HIV-positive people about using contraceptives along with a condom at the same time? To men? To women? What do they say?
- Do you think health care providers talk to HIV-positive people about contraception differently than they do to other clients who are not HIV-positive? Why? Why not?
- Do you think that using a condom alone would be effective in preventing both pregnancy and STI?
- Do you think that using another method of contraception alone would be effective in preventing both pregnancy and STI?
- Do most health care providers suggest that you use only a condom alone (by itself/only a condom) to prevent both pregnancy and STIs?
- Where do you get your contraceptive methods? Do you get them from the HIV care clinic or you have to go to the family planning clinic to get them?
- Do you ever having any problems getting your contraception or staying on your contraception? Why?
- Do most health care providers talk to you about abstinence/not having sex at all?

Now let's talk about how HIV-infected people decide to have children.

- Do you think it is okay for HIV-positive person to get pregnant? If yes why? If no, why not?
- Do you think most HIV-positive people desire to have additional children? Why or why not?
- What kinds of factors influence HIV-positive peoples decisions about whether or not to have additional children?
 - i. Individual—desires, consideration for future
 - ii. Partner
 - iii. Family
 - iv. Community
 - v. Health care providers
 - vi. Religion
 - vii. Culture
 - viii. Child care grant
 - ix. Availability of ARVs

- Do you find talking about having a child with partner/family difficult? Explain.
- What does the family/community think about HIV-positive person getting pregnant/having children?
- What about health care providers? What messages do most HIV-positive people receive from health care providers regarding pregnancy and having children?
- Do you know of HIV-positive people who have had unplanned pregnancies?
 - i. What happened?
- What do you think are the options available for HIV-infected women who have an unplanned pregnancy?
- *If EC not mentioned thus far.* Do you know anything that a woman can do after sex if she had unsafe sex or method failed to prevent her from getting pregnant? What is it? Has a healthcare provider ever discussed it with you?
- *If EC not mentioned ask.* Have you ever heard about the EC?
 - i. Where did you first hear about it?
 - ii. Have you ever used EC?
 - iii. Where is it available?

I would also like to ask a few questions about how you think health care providers at the clinic would respond if you decided to have a child, or if you decided not to have a child?

- Have you talked to a health care provider about having a child since you found out you had HIV?
- Would you feel comfortable talking to a health care provider about having a child?
- Which types of health care providers would you feel most comfortable talking to about having a child? *Probe: family planning sister, HIV doctor, HIV counselor, others*
 - i. If you would not discuss this with a health care provider, why would you not discuss it with them?
 - ii. If you would discuss this with a health care provider, how do you think would they respond to your desire to have a child or not to have a child?
- What have you said to your health care provider at the clinic about having children now that you know your HIV status?
 - i. What advice or counseling have they offered to you about this?
 - ii. What affect this had on your decision on whether to have a child or not?
- How do you think the availability of anti-retroviral treatment may affect your thoughts on having a child?
- How do you think the availability of a prevention of mother-to child transmission service would affect your thoughts on having a child?

We have finished with the questions, but I would like to know if there are any additional comments that you wish to make?

- Is there anything that you think is important for this discussion and we did not talk about it?

- Is there anything that you want to ask before we close the discussion?

Thank you for the time and effort you have given to talk about some sensitive and very personal parts of life. Your thoughts and ideas are very important in creating improved health services that can better meet your needs.

Focus group guide for clients attending Family Planning or STI services

[With appropriate adaptation by FG leader for use with female and male groups]

Focus group to begin with introductions, ground rules, icebreakers

First, we want to talk about your views about contraception and condom use.

- What comes to your mind when you think about contraception?
-If protection during sex mentioned: What are you protecting from?
- What comes to your mind when you think about condom use?
-If protection during sex mentioned: What are you protecting from?
- What kinds of factors influence your thinking about using contraceptives?
 - i. Individual—desires, consideration for future
 - ii. Partner
 - iii. Family
 - iv. Community
 - v. Health care providers
 - vi. Religion
 - vii. Culture
- Do you think that others in your family/community share your views about contraceptive use? Why or why not?
- How do you think most people feel about contraceptive use?
 - I. How do you think most people feel about young people and unmarried young adults using contraceptives? Do you think the issues about contraception are the same for people who are young (teenagers) compared to people who are older (adults)? Why or why not?
 - II. Do you think the issues about contraception are the same people who have children already compared to those who do not have any children? Why or why not?
 - III. How do you think most people feel about HIV-positive people using contraceptives? Do you think the issues about contraception are the same for HIV-positive people compared to HIV-negative people? Why or why not?
- What are the positive things that people do or say in your family/community that would encourage women and men to use contraceptives?
- What are the negative things that people do or say in your family/community that would discourage women and men from using contraceptives?
- What kinds of factors influence your thinking about using condoms?
 - i. Individual—desires, consideration for future
 - ii. Partner
 - iii. Family
 - iv. Community
 - v. Health care providers
 - vi. Religion
 - vii. Culture

- Do you think that others in your family/community share your views about condom use? Why or why not?
 - How do you think most people feel about contraceptive use?
 - I. How do you think most people feel about young people and unmarried young adults using condoms? Do you think the issues about condoms are the same for people who are young (teenagers) compared to people who are older (adults)? Why or why not?
 - II. Do you think the issues about condom use are the same people who have children already compared to those who do not have any children? Why or why not?
 - III. Do you think the issues about condom use are the same for \ people who are stable, long-term relationships compared to people who are is short-term relationships?
 - IV. Do you think married people should use condoms?
 - V. How do you think most people feel about HIV-positive people using condoms? Do you think the issues about contraception are the same for HIV-positive people compared to HIV-negative people? Why or why not?
 - VI. Do you think the issues about condom use are the same for \ people who are stable, long-term relationships compared to people who are is short-term relationships?
 - What are the positive things that people do or say in your family/community that would encourage women and men to use condoms?
 - What are the negative things that people do or say in your family/community that would discourage women and men from using condoms?
-
- Do you think most people feel comfortable talking to their sexual partners about pregnancy and preventing pregnancy? Why or why not? Do you think most couples do talk about this?
 - Who in the couple should make decisions about whether or not to use contraception and which method to use?
 - Do you think most men know if their sexual partner is using contraception and which method she is using?
 - Do you think most people feel comfortable talking to their sexual partners about STDs/HIV and how to prevent it? Do you think most couples do talk about this?
 - Who in the couple should make decisions about whether or not to use a condom?
 - Most of the time, what do you think happens if one partner wants to use a condom and the other does not? Do you think it is okay for your partner to refuse to have sex with you if he/she wants to use a condom and you do not? What about is they are married?
 - How do you think most (members of the opposite sex) feel about contraception and condom use?
 - How important is communication between partners in making decisions about whether or not to use condoms and contraception?
 - How do you think most women feel about using male condoms? Female condoms?
 - How do you think most men feel about using male condoms? Female condoms?
 - How do you think most (members of the opposite sex) feel and react when their partners want to use condoms?

- Do you think that most people use condoms when they have sex? Do you think most people ALWAYS/EVERYTIME use a condom when they have sex?
-

Next, let's discuss the different methods that are available.

- Where can people get condoms from? *Probe male and female condoms separately.*
 - i. Is it easy for women and men to get condoms?
- How do you think most women feel about using male condoms? Female condoms?
- How do you think most men feel about using male condoms? Female condoms?
- What different kinds of contraception are available locally? Are some of these kinds of contraception more appropriate or less appropriate for certain individuals? Why? *Probe for hormonal contraceptives, sterilization, IUDs, male vs. female condoms.*
- Do you think that most people are knowledgeable about the different contraceptive methods that are available? Men? Women?
- Which methods do you think most women prefer? Why?
- Which methods do you think most men prefer? Why?
- How do women choose their methods?
 - i. Are some of these kinds of contraception more (or less) appropriate for certain age groups? Of women? Teenagers? Older women?
 - ii. Are some of these kinds of contraception more (or less) appropriate for people who have or not have a child?
 - iii. Are some of these kinds of contraception more (or less) appropriate for HIV-positive individuals?
 - iv. Do you think women who are sterilized need to use a condom when they have sex?
 - v. Do you think that pregnant women need to use a condom when they have sex?
- Have you heard of people using a non-barrier contraceptive (like depo or the pill) and a male or female condom, together, during sex?
- Do you think that most people use contraceptives with condoms at the same time?
 - i. Why do you think that most people do not use contraceptives plus a condom?
 - ii. For those people that do use contraceptives and a barrier method condom together, why do you think they do that?
 1. What influences these people to use barrier methods plus another method of contraception together? *Probe: personal aspects, partner issues, family & community influences*
 - iii. What are the advantages and disadvantages of using contraceptives plus a condom at the same time?
- Where do you think most people hear about using contraceptives along with a condom at the same time? *Probe: health care workers, peer/social networks, partner influences.*

- What role do you think that (members of the opposite sex) play in making the decision to use contraceptives along with a condom at the same time? Do you think most (members of the opposite sex) would use two methods at the same time? Why or why not?
- Do you think most health care providers regularly talk to people about condom use? To men? To women? What do they say?
- Do most health care providers regularly talk to people about contraceptive use? To men? To women? What do they say?
- Do most health care providers talk to people about using contraceptives along with a condom at the same time? To men? To women? What do they say?
- Do you think that using a condom alone would be effective in preventing both pregnancy and STI?
- Do you think that using another method of contraception alone would be effective in preventing both pregnancy and STI?
- Do most health care providers suggest that you use only a condom alone (by itself/only a condom) to prevent both pregnancy and STIs?
- Do most health care providers talk to you about abstinence/not having sex at all?

 Now let's talk about how people decide to have children.

- Do you think that women plan most pregnancies? That is, do most women want to and make a decision to become pregnant at the time they do become pregnant?
 - I. Is this different for young people? Older people?
 - II. Why do you think women end up having unplanned pregnancies?
 - III. What are the options for women who get pregnant when they haven't planned/wanted to get pregnant?
- *If EC not mentioned thus far.* Do you know anything that a woman can do after sex if she had unsafe sex or method failed to prevent her from getting pregnant? What is it? Has a healthcare provider ever discussed it with you?
- *If EC not mentioned ask.* Have you ever heard about the EC?
 - i. Where did you first hear about it?
 - ii. Have you ever used EC?
 - iii. Where is it available?
- Do you think it is okay for HIV-positive person to get pregnant? If yes why? If no, why not?
- Do you think most HIV-positive people want to have children? Why or why not?
- What does the family/community think about HIV-positive person getting pregnant/having children?
- What about health care providers? What messages do you think most HIV-positive people get from health care providers regarding child bearing/getting pregnant?
- Do you know of HIV-positive people having unplanned pregnancies?

1. What happened?

- What do you think are the options available for HIV-infected women who have an unplanned pregnancy?
-

We have finished with the questions, but I would like to know if there are any additional comments that you wish to make?

- Is there anything that you think is important for this discussion and we did not talk about it?
- Is there anything that you want to ask before we close the discussion?

Thank you for the time and effort you have given to talk about some sensitive and very personal parts of life. Your thoughts and ideas are very important in creating improved health services that can better meet your needs.

Item	Responses	Code for DE
Interviewer initials	1=RM 2=SC 3=SJ 4=PS 5=CM	
Date of interview	DD/MM/YYYY	
Participant ID number	4 digits	
Has the participant completed the informed consent process?	Yes=1 No=0 <i>If No, complete consent before proceeding.</i>	
Demographic & socioeconomic characteristics		
Sex	Female=1 Male=2	
How old are you?	Age in years	
Are you currently working or in school?	Yes=1 No=0 <i>If No, skip to Q9</i>	
What work do you do?	1= Scholar 2= Student 3= Homemaker 4= Unemployed or seeking work 5= Employed 6= Government grant/pension 7=Other, Specify:	
What language do you speak at home?	isiXhosa=1 isiZulu=2 Afrikaans=3 English=4 Other=5 Specify:	
What is the highest level of schooling/education that you have completed?	0= No formal schooling 1= Grade 1/Sub A 2= Grade 2/Sub 2 3= Grade 3/Std 1 4= Grade 4/Std 2 5= Grade 5/Std 3 6= Grade 6/Std 4 7= Grade 7/Std 5 8= Grade 8/Std 6 9= Grade 9/Std 7 10=Grade 10/Std 8 11=Grade 11/Std 9 12=Grade 12/Std 10 without matric 13=Grade 12/Std 10 with matric 14=Some tertiary (Univ/Technikon/College, degree, diploma, or certificate)	
How many biological children of your own do you have?	Enter number	
How many children in total are you financially responsible for?	Enter number	
What kind of home do you live in?	1= House/permanent building 2= Shack on serviced site 3= Shack on unserviced site or other open land 4=Traditional hut or rondavel 5=Council flat	
Are you currently involved with someone?	Yes=1 No=0 <i>If No, skip to Q16</i>	

<p>What is your current relationship status?</p> <ul style="list-style-type: none"> • Are you married? • Are you staying with your husband now? • If you are not married, are you in a relationship with a man now? • If you are in a relationship, do you see it as a long-term/stable/permanent relationship or a short-term/casual relationship? • If long-term/stable, are you staying with your partner now? 	<p>Married, cohabiting=1 Married, not cohabiting =2 Single: in stable relationship, cohabiting=3 Single: in stable relationship, not cohabiting =4 Single: casual relationship now= 5 Single: no relationship now =6 Client chose no to answer =7 Other=8, specify:</p>	
Contraception		
<p>Are you (or your partner) <u>currently using</u> any form of contraception/anything to prevent pregnancy when you have sex?</p>	<p>Yes=1 No=0</p> <p style="text-align: right;">If NO, skip to Q20</p>	
<p>If yes, which of the following methods of contraception/methods to prevent pregnancy are you (or your partner) <u>using currently</u>?</p> <p><i>(Interviewer read each one)</i></p>		
<p>Oral contraceptive pill <i>Women take a pill everyday</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>3-month injectable ('depo') <i>Women have an injection every 3 months, by a nurse or a doctor which stops them from getting pregnant</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>2-month injectable ('nuristerate') <i>Women have an injection every 2 months, by a nurse or a doctor which stops them from getting pregnant</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>Intra-uterine device (IUD) <i>The loop</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>Female sterilization <i>Women have an operation that stops them from having any more children. In this operation, women have their tubes tied.</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>Male sterilization <i>Men have an operation that stops them from having any more children.</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>Male condom <i>Men put a rubber sheath on their penis before sexual intercourse.</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>Female condom <i>Women put a rubber sheath inside themselves/their vagina before sexual intercourse.</i></p>	<p>Yes=1 No=0 DK=9</p>	
<p>Any other methods that we have not talked about?</p>	<p>Yes=1 No=0 <i>If Yes, specify:</i></p>	
<p>For each of the methods you are currently using (as noted above), for about how long have you been using this method of contraception this time?</p>	<p><i>If No method being used currently, skip to Q20.</i></p>	
<p>Method #1 (type: _____) duration <i>(Interviewer: For type, enter type # from above)</i></p>	<p>Months: Years:</p>	
<p>Method #2 (type: _____) duration <i>(Interviewer: For type, enter type # from above)</i></p>	<p>Months: Years:</p>	

Please tell me why you have chosen the method(s) that you are currently using? (INTERVIEWER: PROBE FOR ALL REASONS)		
Method #1 (type: _____) duration (Interviewer: For type, enter type # from above)		
Method #2 (type: _____) duration (Interviewer: For type, enter type # from above)		
Skip to Q21		
If no contraception currently being used, why are you <u>not</u> using contraception any contraception? (INTERVIEWER: PROBE FOR ALL REASONS)		
When did you find out that you have HIV?	DD/MM/YYYY	
Since you found out that you were HIV-infected have you stopped using any method of contraception that you were using before you knew you have HIV?	Yes=1 No=0 If No, skip to Q24	
If yes, which methods have you stopped since you found out you were HIV-infected?		
Method #1 stopped:	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Method #2 stopped:	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Since you found out that you were HIV-infected have you started using any new method of contraception that you were not using before you knew you have HIV?	Yes=1 No=0 If No, skip to Q26	
If yes, which methods have you started since you found out you were HIV-infected?		
Method #1 started	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	

Method #2 started	2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Are you taking ARVs?	Yes=1 No=0 <i>If No, skip to Q26</i>	
When did you start taking ARVs?	DD/MM/YYYY	
Now I want you to think about the time in which you have been using ARVs. The next few questions are about the time that you have been using ARVs		
Since you found out that you were HIV-infected have you stopped using any method of contraception that you were using before you started taking ARVs?	Yes=1 No=0 <i>If No, skip to Q30</i>	
If yes, which methods have you stopped since you started taking ARVs?		
Method #1 stopped:	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Method #2 stopped:	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Since you started using ARVs have you started using any new method of contraception that you were not using before you started ARVs?	Yes=1 No=0 <i>If No, skip to Q32</i>	
If yes, which methods have you started since you started ARVs?		
Method #1 started	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Method #2 started	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Since you started taking ARVs have you had sex <u>without using any method of contraception at all</u> ?	Yes=1 No=0 INAP (no sex since HIV)=7 <i>If No or INAP, skip to Q34</i>	
If so, why? Why did you not use any contraception?		
Since you started taking ARVs have you had sex <u>without using a condom</u> ?	Yes=1 No=0 INAP (no sex since HIV)=7 <i>If No or INAP, skip to Q36</i>	

If so, why? Why did you not use a condom?		
Since you started taking ARVs, how many different people have you had sex with?	Enter number	
Now I want you to think about the time since you found out you have HIV. The next few questions are about the time since you found out you have HIV		
Since you found out that you were HIV-infected have you had sex without using any method of contraception at all?	Yes=1 No=0 INAP (no sex since HIV)=7 <i>If No or INAP, skip to Q39</i>	
If so, why? Why did you not use any contraception?		
Since you found out that you were HIV-infected have you had sex without using a condom?	Yes=1 No=0 INAP (no sex since HIV)=7 <i>If No or INAP, skip to Q41</i>	
If so, why? Why did you not use a condom?		
Since you found out that you were HIV-infected, how many different people have you had sex with?	Enter number	
Since you found out you have HIV, have you (or a partner) ever used emergency contraception (the 'morning after pill')?	Yes=1 No=0 Never heard of emergency contraception=2 INAP (no sex since HIV)=7 Don't know=9	
Sexual activity & condom use		
When is the last time you had sexual intercourse?	In the past week=1 1 week to 1 month ago=2 1 month to 6 months ago=3 More than 6 months ago=4 Before knew HIV=5 <i>If >1 month, skip to Q47</i>	
In the past month, about how many times have you had sex?	About 1 time=1 About 2-10 times (about 1 time per week)=2 About 11-20 times=3 More than 20-30 times (about 1 time per day) =4	
For the last person you had sex with, what was your relationship to that person? (INTERVIEWER: PROBE TO GET EXACT ANSWER)	Current partner (mentioned above)=1 Other person, known for less than 1 month=2 Other person, known for more than 1 month=3 Sex worker=4	
For the last person you had sex with, do you know the HIV status of that person? If so what was it?	Yes, HIV-positive=1 Yes, HIV-negative=2 No, don't know HIV status=0	
The last time you had sexual intercourse did you use a male or female condom?	Yes male condom only=1 Yes female condom only=2 Both=3 No=0 <i>If NO, skip to Q51</i>	
What is the <u>main</u> reason you used a condom the <u>last time</u> you had sex? (INTERVIEWER: PROBE TO GET ALL REASONS)		
<i>Skip to Q52</i>		

Why did you not use a condom the last time you had sex?
(INTERVIEWER: PROBE TO GET ALL REASONS)

For the last person you had sex with, have you discussed condom use with that partner?

Yes=1
 No=0

For the last person you had sex with, who do you feel made the decision about whether or not to use a condom?
(INTERVIEWER: Read all options to participant; select one option only)

Participant only=1
 Participant mostly, some partner=2
 Participant and partner equally=3
 Participant some, partner mostly=4
 Partner only=5

How frequently have you used condoms during sexual intercourse in the last month?
(INTERVIEWER: Read all options to participant; select one option only)

Always (in 100% of the time)=1
 Most times (> half of the time)=2
 Some times (about half of the time)=3
 Rarely (< half of the time)=4
 Never (No condom use in last month)=5
 INAP (no sex in past month)=7

How frequently have you used condoms during sexual intercourse in the 6 months?
(INTERVIEWER: Read all options to participant; select one option only)

Always (in 100% of the time)=1
 Most times (> half of the time)=2
 Some times (about half of the time)=3
 Rarely (< half of the time)=4
 Never (No condom use in last 6 months)=5
 INAP (no sex in past 6 month)=7

The last time you had sexual intercourse did you use a method of contraception/method to prevent pregnancy other than the condom?

Yes =1
 No=0
 DK=9

If NO or DK, skip to Q58

Which method of contraception did you use?

1=2-month, Nuristerate
 2=3-month, Depo/Petogen
 3=Pill
 6=IUD
 7=Female sterilization
 8=Other, specify

For the last person you had sex with, who do you feel made the decision about whether or not to use a form of contraception other than a condom, like the injection or the pill?
(INTERVIEWER: Read all options to participant; select one option only)

Participant only=1
 Participant mostly, some partner=2
 Participant and partner equally=3
 Participant some, partner mostly=4
 Partner only=5

Do you think that/have you been worried that any of the sexual partners you have had in the last 12 months could infect you with an STD of any kind?

Yes=1
 No=0
 INAP (no sex in 12 mos)=7
 Don't know=9

Has a doctor or nurse ever told you that you have a sexually transmitted disease (STD) of any kind?

Yes=1
 No=0
 Don't know=9

In the last 12 months, has a doctor or nurse ever told you that you have a sexually transmitted disease (STD) of any kind?

Yes=1
 No=0
 Don't know=9

In the last 12 months have you had sex with someone because they were giving you money, food, or a place to stay in return?

Yes=1
 No=0
 Don't know=9

In the last 12 months have you had sex with someone after drinking any alcohol or taking any kind of drug? (*Drugs may be tik, mandrax, dagga*)

Yes=1
 No=0
 Don't know=9

Have you ever been forced to have sex without your consent/raped?

Yes=1
 No=0

PLEASE COMPLETE SEXUAL PARTNER DESCRIPTION TABLE

Condom accessibility

Have you ever gotten/or tried to get male condoms for yourself/your partner?

Yes=1
 No=0

If No, skip to Q68

Where do you usually get male condoms?	Another clinic=2 Chemist=3 Friends=4 Other=5, Specify:	
Have you ever had any problems getting male condoms when you needed them?	Yes=1 No=0	
Are male condoms available at this clinic?	Yes=1 No=0 Don't know=9	
Has a <u>health care worker</u> ever showed you how to use a male condom?	Yes=1 No=0	
Have you ever gotten/or tried to get female condoms for yourself/your partner?	Yes=1 No=0 <i>If No, skip to Q73</i>	
Where do you usually get female condoms?	This clinic=1 Another clinic=2 Chemist=3 Friends=4 Other=5, Specify:	
Have you ever had any problems getting female condoms when you needed them?	Yes=1 No=0	
Are female condoms available at this clinic?	Yes=1 No=0 Don't know=9	
Has a <u>health care worker</u> ever showed you how to use a female condom?	Yes=1 No=0	
If both partners are HIV-infected, do you think they still need to use condoms all the time?	Yes=1 No=0	
Why or why not? (INTERVIEWER: PROBE TO GET ALL REASONS)		
Dual protection		
In the last 12 months, have you discussed <u>condom use</u> with any of your sexual partners?	Yes=1 No=0 INAP (no sex in 12 mos)=7 Don't know=9	
In the last 12 months, have you discussed <u>contraceptive use</u> with any of your sexual partners?	Yes=1 No=0 INAP (no sex in 12 mos)=7 Don't know=9	
Have you ever heard of using a condom with another contraceptive method at the same time, like the injection with a condom?	Yes=1 No=0	
Have you ever used a condom with another contraceptive method at the same time, like the injection with a condom?	Yes=1 No=0 <i>If No, skip to Q82</i>	
If yes, why did you do this? (INTERVIEWER: PROBE TO GET ALL REASONS)		
Have you ever heard of using a condom alone (by itself) to prevent both pregnancy and infection?	Yes=1 No=0	
Have you ever used a condom alone to prevent both pregnancy and infection?	Yes=1 No=0 <i>If No, skip to Q82</i>	

If yes, why did you do this? (**INTERVIEWER: PROBE TO GET ALL REASONS**)

Has a <u>health care worker</u> at this clinic ever told you that you can use two different methods at the same time, like the injection with a condom, to prevent both pregnancy and infection?	Yes=1 No=0	
Has a <u>health care worker</u> at this clinic ever told you that a condom alone (by itself) can be used to prevent both pregnancy and infection?	Yes=1 No=0	
Have you ever talked about using a condom with another contraceptive method at the same time with a <u>sexual partner</u> ?	Yes=1 No=0	
Have you ever talked about using a condom alone (by itself) with a <u>sexual partner</u> ?	Yes=1 No=0	
Have you ever talked about using a condom with another contraceptive method at the same time with a <u>friend or family member</u> ?	Yes=1 No=0	
Have you ever talked about using a condom alone (by itself) with a <u>friend or family member</u> ?	Yes=1 No=0	
For you / in your relationship, what are the <u>main</u> benefits of using a condom during sex? (INTERVIEWER: Circle as many as apply)	Protection against pregnancy=1 Protection against HIV/other STDs=2 Protection against both infection and pregnancy=3 Makes partner happy=4 Other=5 Specify:	
For you / in your relationship, what are the <u>main</u> problems with using a condom during sex? (INTERVIEWER: Circle as many as apply)	Difficult to get condoms=1 Condoms not comfortable for me/partner=2 Condoms not necessary in current relationship=3 Can not introduce condoms into relationship/tell partner to use condoms=4 Other=5 Specify:	
Current fertility intentions		
Have you/your partner ever been pregnant?	Yes=1 No=0	
When were you/your partner last pregnant?	Enter year: 1919=Currently pregnant	
Have you/ a partner of yours become pregnant since you found out that you have HIV?	Yes=1 No=0	
IF PARTICIPANT NOT ON ARVS, SKIP TO Q last preg then or wait		
Have you/a partner of yours become pregnant since you started ARVs?		
The last time you or your partner became pregnant, did you want to become pregnant then, did you want to wait until later, or did you want no (more) children at all?	Never been pregnant=0 Then=1 Later=2 No (more)=3 Don't know=9	
Do you want to have (more) children in the future?	Yes=1 No=0 Don't know=9	
Have you discussed having (more) children in the future with your partner?	Yes=1 No=0 INAP (no partner)=7	
How do you think your partner feels/would feel about having (more) children?	Very positive=1 Mostly positive=2 Mixed=3 Negative=4 Very negative=5	

How strongly (does/would) your partner's opinion influence your decision whether or not to have children? (INTERVIEWER: read all options)	Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4 N/A (no partner)=7	
Do you think HIV positive people should be able to have children if they want to?	Yes=1 No=0 Don't know=9	
Do you think (you/your partner) will become pregnant/have children in the future?	Yes=1 No=0 Don't know=9	
How would you feel if you (your partner) became pregnant in the next few months? (read all options)	Very happy=1 Somewhat happy=2 Mixed feelings=3 Somewhat sad=4 Very sad/upset=5 Don't know=9	
How do you think that knowing there are/taking ARVs has influenced your /your partner's decision whether or not to have a child?		
How do you think most HIV-infected people feel about PMTCT (project that prevents the child from being infected by the mother during birth)?	Very happy=1 Somewhat happy=2 Mixed feelings=3 Somewhat sad=4 Very sad/upset=5 Don't know=9	
How do you think knowing there is project has influenced your /your partner's decision whether or not to have a child?		
Interactions with reproductive health services		
Since you became HIV-infected, have you discussed having (more) children with a <u>health care provider</u> working at a hospital or clinic?	Yes=1 No=0 <i>If No, skip to q112</i>	
What kind(s) of health care providers have you discussed this with? (INTERVIEWER: Circle as many as apply)	Nurse=1 Doctor=2 Counselor=3 Social worker=4 Other=5, <i>Specify:</i>	
How do you think that <u>health care provider</u> felt about the possibility of you (your partner) having (more) children? (INTERVIEWER: read all options)	Very positive=1 Mostly positive=2 Mixed feelings/had no opinion=3 Negative=4 Very negative=5	
How strongly has that <u>health care provider</u> opinion influenced your (your partner's) decision whether or not to have (more) children?	Very strongly/must agree with=1 Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4	
Since you became HIV-infected, have you discussed using contraception with a <u>health care provider</u> working at a hospital or clinic?	Yes=1 No=0 <i>If No, skip to q116</i>	
What kind(s) of health care providers have you discussed this with? (INTERVIEWER: Circle as many as apply)	Nurse=1 Doctor=2 Counselor=3 Social worker=4 Other=5, <i>Specify:</i>	
Did that <u>health care provider</u> recommend a particular contraceptive option to you (or for your partner)? If yes, which one(s)? (INTERVIEWER: Circle as many as apply)	Oral contraceptive pill=1 2-month injectable=2 3-month injectable=3 IUD=4 Female sterilization=5 Male sterilization=6 Female condom=7 Male condom=8 Other methods=9 <i>Specify:</i>	

REASONS)		
Has any <u>health care provider</u> ever suggested abstinence/ or said that HIV-infected people should not have sex?	Yes =1 No =0	
How strongly has that <u>health care provider</u> opinion influenced your (your partner's) decision whether or not to have sex?	Very strongly/must agree with=1 Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4	
IF PARTICIPANT NOT ON ARVS, SKIP TO REPRODUCTIVE HEALTH OPTIONS SECTION		
Since you started ARVs, have you discussed having (more) children with a <u>health care provider</u> working at a hospital or clinic?	Yes=1 No=0 <i>If No, skip to q122</i>	
What kind(s) of health care providers have you discussed this with? (INTERVIEWER: Circle as many as apply)	Nurse=1 Doctor=2 Counselor=3 Social worker=4 Other=5, <i>Specify:</i>	
How do you think that <u>health care provider</u> felt about the possibility of you (your partner) having (more) children? (INTERVIEWER: read all options)	Very positive=1 Mostly positive=2 Mixed feelings/had no opinion=3 Negative=4 Very negative=5	
How strongly has that <u>health care provider</u> opinion influenced your (your partner's) decision whether or not to have (more) children?	Very strongly/must agree with=1 Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4	
Since you started ARVs, have you discussed using contraception with a <u>health care provider</u> working at a hospital or clinic?	Yes=1 No=0 <i>If No, skip to q126</i>	
What kind(s) of health care providers have you discussed this with? (INTERVIEWER: Circle as many as apply)	Nurse=1 Doctor=2 Counselor=3 Social worker=4 Other=5, <i>Specify:</i>	
Did that <u>health care provider</u> recommend a particular contraceptive option to you (or for your partner)? If yes, which one(s)? (INTERVIEWER: Circle as many as apply)	Oral contraceptive pill=1 2-month injectable=2 3-month injectable=3 IUD=4 Female sterilization=5 Male sterilization=6 Female condom=7 Male condom=8 Other methods=9 <i>Specify:</i>	
Do you know why he/she told you to use that method? (INTERVIEWER: PROBE TO GET ALL REASONS)		
Reproductive health options		
Since you found out you had HIV, has a nurse, counselor or doctor working at the clinic/hospital ever told you about emergency contraception (EC)?	Yes=1 No=0 <i>If No, skip to q134</i>	
If yes, what type of provider discussed EC with you? (INTERVIEWER: Circle as many as apply)	Nurse=1 Counselor=2 Doctor=3 Other provider=4, <i>Specify:</i>	
If yes, what did they tell you about EC?		

Do you know what EC is?	No=0 <i>If No, skip to q137</i>	
If you had unprotected sex now, how likely would you be to consider EC as an option for you or your partner? (INTERVIEWER: read all options to participant)	Very likely/definitely=1 Likely/probably would=2 Don't know/No opinion=3 Unlikely/probably would not=4 Very unlikely/never=5	
Why? OR Why not?		
Since you found out you had HIV, has a nurse, counselor or doctor working at the clinic/hospital ever discussed using condoms with you?	Yes=1 No=0 <i>If No, skip to Q139</i>	
If yes, what type of provider discussed condom use with you? (INTERVIEWER: Circle as many as apply)	Nurse=1 Counselor=2 Doctor=3 Other provider=8 Specify:	
Conclusion		
Do you think that you may like to discuss issues regarding childbearing or contraception more in the future? Do you have any questions on these topics?	Yes=1 No=0	
If yes, with whom would you like to discuss these issues? (INTERVIEWER: Read all and circle as many as apply)	Nurse (professional, enrolled)=1 Counselor=2 Community health worker=3 Doctor=4 Other (professional)=8 specify: Other (non-professional)=9 specify:	
What specific issues would you like to discuss?		
Are there any issues that we have not asked you about that you would like to raise regarding this topic?		
This is the end of the interview. Thank you for your time.		

Dual protection & fertility intentions among clients receiving Family Planning / STI services

Item	Responses	Code for DE
Interviewer initials	1=RM 2=SC 3=S 4=P 5=CM	
Date of interview	DD/MM/YYYY	
Participant ID number	4 digits	
Has the participant completed the informed consent process?	Yes=1 No=0 <i>If No, complete consent before proceeding.</i>	
Demographic & socioeconomic characteristics		
Sex	Female=1 Male=2	
How old are you?	Age in years	
Are you currently working?	Yes=1 No=0 <i>If No, skip to Q9</i>	
What work do you do?	1= Scholar 2= Student 3= Homemaker 4= Unemployed or seeking work 5= Employed 6= Government grant/pension 7=Other, Specify:	
What language do you speak at home?	isiXhosa=1 isiZulu=2 Afrikaans=3 English=4 Other=5 Specify:	
What is the highest level of schooling/education that you have completed?	0= No formal schooling 1= Grade 1/Sub A 2= Grade 2/Sub 2 3= Grade 3/Std 1 4= Grade 4/Std 2 5= Grade 5/Std 3 6= Grade 6/Std 4 7= Grade 7/Std 5 8= Grade 8/Std 6 9= Grade 9/Std 7 10=Grade 10/Std 8 11=Grade 11/Std 9 12=Grade 12/Std 10 without matric 13=Grade 12/Std 10 with matric 14=Some tertiary (Univ/Technikon/College, degree, diploma, or certificate)	
How many biological children of your own do you have?	Enter number	
If yes, how many boys and girls?	Enter number	
How old is the youngest of your living children?	Enter number	
How many children in total are you financially responsible for?	Enter number	

Item	Responses	Code for DE
What kind of home do you live in?	1= House/permanent building 2= Shack on serviced site 3= Shack on unserviced site or other open land 4=Traditional hut or rondavel 5=Council flat	
Are you currently in a relationship with someone?	Yes=1 No=0 <i>If No, skip to Q16</i>	
Is this person the parent of any of your children?	Yes=1 No=0	
What is your current relationship status? <ul style="list-style-type: none"> Are you married? Are you staying with your husband now? If you are not married, are you in a relationship with a man now? If you are in a relationship, do you see it as a long-term/stable/permanent relationship or short-term/casual relationship? If long-term/stable, are you staying with your partner now? 	Married cohabiting=1 Married, not cohabiting=2 Single: in stable relationship, cohabiting =3 Single: in stable relationship, not cohabiting =4 Single: casual relationship =5 Single: no relationship now =6 Client chose not to answer =7 Other=8 specify:	
Contraception		
Are you (or your partner) <u>currently using</u> any form of contraception/ anything to prevent pregnancy when you have sex?	Yes=1 No=0 <i>If NO, skip to Q20</i>	
If yes, which of the following methods of contraception/methods to prevent pregnancy are you (or your partner) <u>using currently</u> ? <i>(Interviewer read each one)</i>		
Oral contraceptive pill Women take a pill everyday	Yes=1 No=0 DK=9	
3-month injectable ('depo') <i>Women have an injection every 3 months, by a nurse or a doctor which stops them from getting pregnant</i>	Yes=1 No=0 DK=9	
2-month injectable ('nuristerate') <i>Women have an injection every 2 months, by a nurse or a doctor which stops them from getting pregnant</i>	Yes=1 No=0 DK=9	
Intra-uterine device (IUD) <i>The loop</i>	Yes=1 No=0 DK=9	
Female sterilization <i>Women have an operation that stops them from having any more children. In this operation, women have their tubes tied</i>	Yes=1 No=0 DK=9	
Male sterilization <i>Men have an operation that stops them from having any more children</i>	Yes=1 No=0 DK=9	
Male condom <i>Men put a rubber sheath on their penis before sexual intercourse</i>	Yes=1 No=0 DK=9	
Female condom <i>Women put a rubber sheath inside themselves/their vagina before sexual intercourse</i>	Yes=1 No=0 DK=9	
Any other methods that we have not talked about?	Yes=1 No=0 <i>If Yes, specify:</i>	

Item	Responses	Code for DE
In the last 12 months have you started any method of contraception?	Yes=1 No=0 <i>If No, skip to Q25</i>	
If yes, which methods have you started?		
Method #1 started	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
Method #2 started	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 4=Male condom 5=Female condom 6=IUD 7=Female sterilization 8=Other	
In the last 12 months have you had sex <u>without using any method of contraception at all</u> ?	Yes=1 No=0 INAP (no sex in 12 months)=7 <i>If No or INAP, skip to Q27</i>	
If so, why? Why did you not use any contraception?		
In the last 12 months have you had sex <u>without using a condom</u> ?	Yes=1 No=0 INAP (no sex in 12 months)=7 <i>If No or INAP, skip to Q29</i>	
If so, why? Why did you not use a condom?		
In the last 12 months, have you (or a partner) ever used emergency contraception (the 'morning after pill')?	Yes=1 No=0 Never heard of emergency contraception=2 INAP (no sex in 12 months)=7 Don't know=9	
Sexual activity & condom use		
How many different sexual partners have you had in the last 12 months?	Enter number	
When is the last time you had sexual intercourse?	In the previous week=1 1 week to 1 month ago=2 1 month to 6 months ago=3 More than 6 months ago=4 <i>If >1 month, skip to Q37</i>	
In the past month, about how many times have you had sex?	About 1 time=1 About 2-10 times (about 1 time per week)=2 About 11-20 times=3 More than 20-30 times (about 1 time per day) =4	

Item	Responses	Code for DE
For the last person you had sex with, what was your relationship to that person? (INTERVIEWER: PROBE TO GET EXACT ANSWER)	Current partner (mentioned above)=1 Other person, known for less than 1 month=2 Other person, known for more than 1 month=3 Sex worker=4	
For the last person you had sex with, do you know the HIV status of that person? If so, what was it?	Yes, HIV-positive=1 Yes, HIV-negative=2 No, don't know HIV status=0	
The last time you had sexual intercourse did you use a male or female condom?	Yes male condom only=1 Yes female condom only=2 Both=3 No=0 <i>If NO, skip to Q41</i>	
What is the <u>main</u> reason you used a condom the <u>last time</u> you had sex? (INTERVIEWER: PROBE TO GET ALL REASONS)		<i>Skip to Q42</i>
Why did you not use a condom the <u>last time</u> you had sex? (INTERVIEWER: PROBE TO GET ALL REASONS)		
For the last person you had sex with, have you discussed <u>condom use</u> with that partner?	Yes=1 No=0	
For the last person you had sex with, who do you feel made the decision about whether or not to use a condom? (INTERVIEWER: Read all options to participant; select one option only)	Participant only=1 Participant mostly, some partner=2 Participant and partner equally=3 Participant some, partner mostly=4 Partner only=5	
For the last person you had sex with, who do you feel made the decision about whether or not to use a form of contraception other than a condom, like the injection or the pill? (INTERVIEWER: Read all options to participant; select one option only)	Participant only=1 Participant mostly, some partner=2 Participant and partner equally=3 Participant some, partner mostly=4 Partner only=5	
How frequently have you used condoms during sexual intercourse in the last month? (INTERVIEWER: Read all options to participant; select one option only)	Always (in 100% of the time)=1 Most times (> half of the time)=2 Some times (about half of the time)=3 Rarely (< half of the time)=4 Never (No condom use in last month)=5 INAP (no sex in past month)=7	
How frequently have you used condoms during sexual intercourse in the 6 months? (INTERVIEWER: Read all options to participant; select one option only)	Always (in 100% of the time)=1 Most times (> half of the time)=2 Some times (about half of the time)=3 Rarely (< half of the time)=4 Never (No condom use in last month)=5 INAP (no sex in past 6 month)=7	

Item	Responses	Code for DE
The last time you had sexual intercourse did you use a method of contraception/method to prevent pregnancy other than the condom?	Yes =1 No=0 DK=9 <i>If NO or DK, skip to Q50</i>	
Which method of contraception did you use?	1=2-month, Nuristerate 2=3-month, Depo/Petogen 3=Pill 6=IUD 7=Female sterilization 8=Other, specify	
For the last person you had sex with, who do you feel made the decision about whether or not to use a form of contraception other than a condom, like the injection or the pill? (INTERVIEWER: Read all options to participant; select one option only)	Participant only=1 Participant mostly, some partner=2 Participant and partner equally=3 Participant some, partner mostly=4 Partner only=5	
Do you think that/have you been worried that any of the sexual partners you have had in the last 12 months could infect you with an STD of any kind?	Yes=1 No=0 INAP (no sex in 12 mos)=7 Don't know=9	
Has a doctor or nurse <u>ever</u> told you that you have a sexually transmitted disease (STD) of any kind?	Yes=1 No=0 Don't know=9	
In the last 12 months, has a doctor or nurse ever told you that you have a sexually transmitted disease (STD) of any kind?	Yes=1 No=0 Don't know=9	
In the last 12 months have you had sex with someone because they were giving you money, food, or a place to stay in return?	Yes=1 No=0 Don't know=9	
In the last 12 months have you had sex with someone after drinking any alcohol or taking any kind of drug? (<i>Drugs may be tik, mandrax, dagga</i>)	Yes=1 No=0 Don't know=9	
Have you ever been forced to have sex without your consent/raped?	Yes=1 No=0	
PLEASE COMPLETE SEXUAL PARTNER DESCRIPTION TABLE		
Condom accessibility		
Have you ever gotten/or tried to get male condoms for yourself/your partner?	Yes=1 No=0 <i>If No, skip to Q58</i>	
Where do you usually get male condoms?	This clinic=1 Another clinic=2 Chemist=3 Friends=4 Other=5, Specify:	
Have you ever had any problems getting male condoms when you needed them?	Yes=1 No=0	
Are male condoms available at this clinic?	Yes=1 No=0 Don't know=9	
Has a <u>health care worker</u> ever showed you how to use a male condom?	Yes=1 No=0	
Have you ever gotten/or tried to get female condoms for yourself/your partner?	Yes=1 No=0 <i>If No, skip to Q63</i>	

Item	Responses	Code for DE
Where do you usually get female condoms?	This clinic=1 Another clinic=2 Chemist=3 Friends=4 Other=5, Specify:	
Have you ever had any problems getting female condoms when you needed them?	Yes=1 No=0	
Are female condoms available at this clinic?	Yes=1 No=0 Don't know=9	
Has a <u>health care worker</u> ever showed you how to use a female condom?	Yes=1 No=0	
If both partners are HIV-infected, do you think they still need to use condoms all the time?	Yes=1 No=0	
Why or why not? (INTERVIEWER: PROBE TO GET ALL REASONS)		
Dual protection		
In the last 12 months, have you discussed <u>condom use</u> with any of your sexual partners?	Yes=1 No=0 INAP (no sex in 12 mos)=7 Don't know=9	
In the last 12 months, have you discussed <u>contraceptive use</u> with any of your sexual partners?	Yes=1 No=0 INAP (no sex in 12 mos)=7 Don't know=9	
Have you ever heard of using a condom with another contraceptive method at the same time, like the injection with a condom?	Yes=1 No=0	
Have you ever used a condom with another contraceptive method at the same time, like the injection with a condom?	Yes=1 No=0 <i>If No, skip to Q72</i>	
If yes, why did you do this? (INTERVIEWER: PROBE TO GET ALL REASONS)		
Have you ever heard of using a condom alone (by itself) to prevent both pregnancy and infection?	Yes=1 No=0	
Have you ever used a condom alone to prevent both pregnancy and infection?	Yes=1 No=0 <i>If No, skip to Q75</i>	
Has a <u>health care worker</u> at this clinic ever told you that you can use two different methods at the same time, like the injection with a condom, to prevent both pregnancy and infection?	Yes=1 No=0	
Has a <u>health care worker</u> at this clinic ever told you that a condom alone (by itself) can be used to prevent both pregnancy and infection?	Yes=1 No=0	
Have you ever talked about using a condom with another contraceptive method at the same time with a <u>sexual partner</u> ?	Yes=1 No=0	
Have you ever talked about using a condom alone (by itself) with a <u>sexual partner</u> ?	Yes=1 No=0	

Item	Responses	Code for DE
Have you ever talked about using a condom with another contraceptive method at the same time with a <u>friend or family member</u> ?	Yes=1 No=0	
Have you ever talked about using a condom alone (by itself) with a <u>friend or family member</u> ?	Yes=1 No=0	
For you / in your relationship, what are the <u>main</u> benefits of using a condom during sex? (INTERVIEWER: Circle as many as apply)	Protection against pregnancy=1 Protection against HIV/other STDs=2 Protection against both infection and pregnancy=3 Makes partner happy=4 Other=5 Specify:	
For you / in your relationship, what are the <u>main</u> problems with using a condom during sex? (INTERVIEWER: Circle as many as apply)	Difficult to get condoms=1 Condoms not comfortable for me/partner=2 Condoms not necessary in current relationship=3 Can not introduce condoms into relationship/tell partner to use condoms=4 Other=5 Specify:	
Current fertility intentions		
Have you/your partner ever been pregnant?	Yes=1 No=0	
When were you/your partner last pregnant?	Enter year: 1919=Currently pregnant	
The last time you or your partner became pregnant, did you want to become pregnant then, did you want to wait until later, or did you want no (more) children at all?	Never been pregnant=0 Then=1 Later=2 No (more)=3 Don't know=9	
Do you want to have (more) children in the future?	Yes=1 No=0 Don't know=9	
Have you discussed having (more) children in the future with your partner?	Yes=1 No=0 N/A (no partner)=7	
How do you think your partner feels/would feel about having (more) children?	Very positive=1 Mostly positive=2 Mixed=3 Negative=4 Very negative=5	
How strongly (does/would) your partner's opinion influence your decision whether or not to have children? (INTERVIEWER: read all options)	Very strongly/must agree with=1 Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4 N/A (no partner)=7	
Do you think HIV positive people should be able to have children if they want to?	Yes=1 No=0 Don't know=9	
Do you think (you/your partner) will become pregnant/have children in the future?	Yes=1 No=0 Don't know=9	
How would you feel if you (your partner) became pregnant in the next few months? (read all options)	Very happy=1 Somewhat happy=2 Mixed feelings=3 Somewhat sad=4 Very sad/upset=5 Don't know=9	
Interactions with reproductive health services		

Item	Responses	Code for DE
In the last 12 months, have you discussed having (more) children with a <u>health care provider</u> working at a hospital or clinic?	Yes=1 No=0 <i>If No, skip to Q96</i>	
What kind(s) of health care providers have you discussed this with? (INTERVIEWER: Circle as many as apply)	Nurse=1 Doctor=2 Counselor=3 Social worker=4 Other=5, <i>Specify:</i>	
How do you think that <u>health care provider</u> felt about the possibility of you (your partner) having (more) children? (INTERVIEWER: read all options)	Very positive=1 Mostly positive=2 Mixed feelings/had no opinion=3 Negative=4 Very negative=5	
How strongly has that <u>health care provider</u> opinion influenced your (your partner's) decision whether or not to have (more) children?	Very strongly/must agree with=1 Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4	
In the last 12 months, have you discussed using contraception with a <u>health care provider</u> working at a hospital or clinic?	Yes=1 No=0 <i>If No, skip to Q99</i>	
What kind(s) of health care providers have you discussed this with? (INTERVIEWER: Circle as many as apply)	Nurse=1 Doctor=2 Counselor=3 Social worker=4 Other=5, <i>Specify:</i>	
Did that <u>health care provider</u> recommend a particular contraceptive option to you (or for your partner)? If yes, which one(s)?	Oral contraceptive pill=1 2-month injectable=2 3-month injectable=3 IUD=4 Female sterilization=5 Male sterilization=6 Female condom=7 Male condom=8 Other methods=9 <i>Specify:</i>	
Has any <u>health care provider</u> ever suggested abstinence/not having sex at all to you?	Yes =1 No=0 <i>If no, skip to Reproductive Health Options section</i>	
How strongly has that <u>health care provider</u> opinion influenced your (your partner's) decision whether or not to abstain?	Very strongly/must agree with=1 Somewhat/take into consideration=2 Little/nice to know=3 No influence at all=4	
Reproductive health options		
Has a nurse, counselor or doctor working at the clinic/hospital ever told you about emergency contraception (EC)?	Yes=1 No=0 <i>If No, skip to Q109</i>	
If yes, what type of provider discussed EC with you? (INTERVIEWER: Circle as many as apply)	Nurse=1 Counselor=2 Doctor=3 Other provider=4, <i>Specify:</i>	
If yes, what did they tell you about EC?		
Do you know what EC is?	Yes=1 No=0 <i>If No, skip to Q112</i>	

Item	Responses	Code for DE
If you had unprotected sex now, how likely would you be to consider EC as an option for you or your partner? (INTERVIEWER: read all options to participant)	Very likely/definitely=1 Likely/probably would=2 Don't know/No opinion=3 Unlikely/probably would not=4 Very unlikely/never=5	
Why? OR Why not?		
In the last 12 months, has a nurse, counselor or doctor working at the clinic/hospital ever discussed using condoms with you?	Yes=1 No=0 <i>If No, skip to Q114</i>	
If yes, what type of provider discussed condom use with you? (INTERVIEWER: Circle as many as apply)	Nurse=1 Counselor=2 Doctor=3 Other provider=8 Specify:	
Conclusion		
Do you think that you may like to discuss issues regarding childbearing or contraception more in the future? Do you have any questions on these topics?	Yes=1 No=0	
If yes, with whom would you like to discuss these issues? (INTERVIEWER: Read all and circle as many as apply)	Nurse (professional, enrolled)=1 Counselor=2 Community health worker=3 Doctor=4 Other (professional)=8 specify: Other (non-professional)=9 specify:	
What specific issues would you like to discuss?		
Are there any issues that we have not asked you about that you would like to raise regarding this topic?		
This is the end of the interview. Thank you for your time.		

SEXUAL PARTNER DESCRIPTION TABLE: Complete this table for all sexual partners in the past 6 months

	1	2	3	4	5	6	7	8	9
What is your relationship to this partner? <i>Main partner (spouse or other regular partner)=1</i> <i>Casual partner (non-regular partner)=2</i>									
In the last 6 months have you lived with this partner? Yes=1 No=0									
What is the approximate age of this partner? <i>Enter in years</i>									
How long have you known this partner? <i>Enter years; enter 0 for less than 1 year</i>									
Approximately how often have you had sex with this partner, per month, over the last six months?									
<i>About 1 time per month=1</i> <i>About 2-10 times per month=2 (about 1 time per week)</i> <i>About 11-20 times per month=3</i> <i>More than 20-30 times per month=4 about 1 time per day)</i>									
Do you know the HIV status of this partner? Yes, HIV-positive=1 No, don't know HIV status=0									
Do you think you may be at risk of contracting an STD from this partner? Yes=1 No=0									
During the last 6 months have you been trying to have a child (become pregnant) wit this partner? Yes=1 No=0									
During the last 6 months have you ever drank alcohol or used drugs before having sex with this partner? Yes=1 No=0									
During the last 6 months, how often have you used a condom with this partner? <i>Always (in 100% of the time)=1</i> <i>Most times (> half of the time)=2</i> <i>Some times (about half of the time)=3</i> <i>Rarely (< half of the time)=4</i> <i>Never (No condom use in last six months)=5</i>									
During the last 6 months, have you / this partner used another form of contraception (other than condoms)? Yes=1 No=0									
If you have used another form of contraception, which one? <i>Oral contraceptive pill=1</i> <i>2-month injectable/NET-EN=2</i> <i>3-month injectable/DMPA=3</i> <i>IUD=4</i> <i>Female sterilization=5</i> <i>Male sterilization=6</i> <i>Other methods=9 Specify:</i>									
Have you ever talked about condom use with this partner? Yes=1 No=0									
Have you ever talked about non-barrier contraceptive use with this partner? Yes=1 No=0									

Dual protection knowledge and practices among health care providers

Item	Responses	Code for DE
Interviewer initials	1=RM 2=SC 3=S 4=P 5=CM	
Date of interview	DD/MM/YYYY	
Participant ID number	4 digits	
Has the participant completed the informed consent process?	Yes=1 No=0 <i>If No, complete consent before proceeding.</i>	
Background		
Facility name and code		
What is your rank/position at the facility?	Medical practitioner=1 Professional nurse=2 Enrolled nurse/staff nurse=3 Enrolled nurse assistant=4 Health promotion officer=5 Other (specify)=6	
Are you the manager/supervisor for this facility?	Yes=1 No=0	
How long have you been working at this facility?	<div style="text-align: right;">years</div> <div style="text-align: center;">-----</div> If less than 1 year months <div style="text-align: center;">-----</div>	
How many years ago did you finish your basic training?	<div style="text-align: right;">years</div> <div style="text-align: center;">-----</div> If less than 1 year months <div style="text-align: center;">-----</div>	
Have you completed a family planning course?	Yes=1 No=0	
Have you been trained to provide VCT (HIV counseling and testing)?	Yes=1 No=0	
Have you been trained to provide HIV care services?	Yes=1 No=0	
Have you been trained to provide STI diagnosis and treatment?	Yes=1 No=0	
I'd like to ask you about the services you have provided to people at this clinic in the last 6 months. Do you yourself provide ...		
Family planning	Yes=1 No=0	
VCT (HIV counseling and testing)	Yes=1 No=0	
HIV care services	Yes=1 No=0	

Item	Responses	Code for DE
STI diagnosis and treatment	Yes=1 No=0	
Contraceptive options		
What methods of contraception are available at this facility? INTERVIEWER: Record all that apply	Oral contraceptive=1 Nuristerate=2 Depo/petogen=3 IUD=4 Female sterilization=5 Male sterilization=6 Male condom=7 Female condom=8 Emergency contraception=9 Other=10, specify	
In your experience, which contraceptive method is most popular among women seeking family planning at this facility? INTERVIEWER: Record all that apply	Oral contraceptive=1 Nuristerate=2 Depo/petogen=3 IUD=4 Female sterilization=5 Male sterilization=6 Male condom=7 Female condom=8 Emergency contraception=9 Other=10, specify	
What makes this the most popular method for most women seeking family planning at this facility?		
Are there any methods that are available at this facility that you think are underused? That is, are there methods that you think women do not choose as often as they should?	Yes=1 No=0 Don't know=9 <i>If No or DK, skip to Q24</i>	
If yes, which methods? INTERVIEWER: Record all that apply	Oral contraceptive=1 Nuristerate=2 Depo/petogen=3 IUD=4 Female sterilization=5 Male sterilization=6 Male condom=7 Female condom=8 Emergency contraception=9 Other=10, specify	
Why do you think that more women should be using this method?		
Do you think there are methods which are better than others?	Yes=1 No=0 Don't know=9 <i>If No, skip to Q26</i>	

Item	Responses	Code for DE
If yes, which methods? INTERVIEWER: Record all that apply	Oral contraceptive=1 Nuristerate=2 Depo/petogen=3 IUD=4 Female sterilization=5 Male sterilization=6 Male condom=7 Female condom=8 Emergency contraception=9 Other=10, specify	
Do you think there are candidates most suitable for certain methods?	Yes=1 No=0 Don't know=9 <i>If No, skip to Q28</i>	
If yes, how do you assess them? Please describe.		
Do you think HIV-infected women's contraceptive needs are different from the contraceptive needs of women who do not have HIV?	Yes=1 No=0 Don't know=9 <i>If DK, skip to Q30</i>	
Why? Please describe.		
Are there some methods of contraception that you think are <u>more</u> appropriate for HIV-infected women? Methods that you think HIV-infected women should use?	Yes=1 No=0 Don't know=9 <i>If No or DK, skip to Q33</i>	
If yes, which ones? INTERVIEWER: Record all that apply	Oral contraceptive=1 Nuristerate=2 Depo/petogen=3 IUD=4 Female sterilization=5 Male sterilization=6 Male condom=7 Female condom=8 Emergency contraception=9 Other=10, specify	
Why?		
Are there some methods of contraception that you think are <u>less</u> appropriate for HIV-infected women? Methods that you think HIV-infected women should not use?	Yes=1 No=0 Don't know=9 <i>If No or DK, skip to Q36</i>	

Item	Responses	Code for DE
If yes, which ones? INTERVIEWER: Record all that apply	Oral contraceptive=1 Nuristerate=2 Depo/petogen=3 IUD=4 Female sterilization=5 Male sterilization=6 Male condom=7 Female condom=8 Other Specify=9	
Why?		
How do you assess client's risk for STDs? Please describe.		
On the basis of your assessment how do you counsel clients about options for the prevention of disease and unwanted pregnancy?		
How do counsel clients about contraceptives? Please describe.		
Have you ever heard of the term "dual protection"	Yes=1 No=0 Don't know=9 <i>If No or DK, skip to Q41</i>	
Condom & contraceptive services		
Are male condoms available at this facility (in general)?	Yes=1 No=0 <i>If No or DK, skip to Q43</i>	
Are male condoms in stock and accessible at this facility today?	Yes=1 No=0	
Are female condoms available at this facility (in general)?	Yes=1 No=0 <i>If No or DK, skip to Q45</i>	
Are female condoms in stock and accessible at this facility today?	Yes=1 No=0	
Are <u>condoms</u> distributed to all women attending the <u>family planning service</u> at this clinic?	Yes=1 No=0	
Is protection from STDs discussed with all women attending the <u>family planning service</u> at this clinic?	Yes=1 No=0	
Do men ever attend the <u>family planning service</u> at this clinic?	Yes=1 No=0	
Are <u>condoms</u> distributed to all men attending the <u>STD service</u> at this clinic?	Yes=1 No=0	
Are <u>condoms</u> distributed to all women attending the <u>STD service</u> at this clinic?	Yes=1 No=0	
Is <u>contraception</u> routinely discussed with men attending the <u>STD service</u> at this clinic?	Yes=1 No=0	
Is <u>contraception</u> routinely discussed with women attending the <u>STD service</u> at this clinic?	Yes=1 No=0	

Item	Responses	Code for DE
Are <u>condoms</u> distributed to all men attending the <u>HIV care service</u> at this clinic?	Yes=1 No=0	
Are <u>condoms</u> distributed to all women attending the <u>HIV care service</u> at this clinic?	Yes=1 No=0	
Is <u>contraception</u> routinely discussed with men attending the <u>HIV care service</u> at this clinic?	Yes=1 No=0	
Is <u>contraception</u> routinely discussed with women attending the <u>HIV care service</u> at this clinic?	Yes=1 No=0	
What are your challenges in working with contraceptive/family planning clients? What are rewards of working with family planning clients?		
Condom & contraceptive use		
What proportion (percentage) of sexually active clients attending this facility (FP, STD, HIV care services) do you think use <u>contraception</u> in their sexual relations?	Few/None (0-10%)=1 Some, less than half (10-40%)=2 Some, about half (40-60%)=3 Some, more than half (60-90%)=4 Most/all (90-100%)=5	
What proportion (percentage) of sexually active clients attending this facility (FP, STD, HIV care services) do you think use <u>condoms</u> in their sexual relations?	Few/None (0-10%)=1 Some, less than half (10-40%)=2 Some, about half (40-60%)=3 Some, more than half (60-90%)=4 Most/all (90-100%)=5	
For most clients at this facility, what do you think are the <u>main</u> reasons of using a condom during sex? INTERVIEWER: Circle all that apply	Protection against pregnancy=1 Protection against HIV/other STDs=2 Protection against both infection and pregnancy=3 Makes partner happy=4 Other=5 Specify:	
For most clients at this facility, what do you think are the <u>main</u> problems with using a condom during sex? INTERVIEWER: Circle all that apply	Difficult to get condoms=1 Condoms not comfortable for me/partner=2 Condoms not necessary in current relationship=3 Can not introduce condoms into relationship/tell partner to use condoms=4 Other=5 Specify:	
For most sexually active clients attending this facility (FP, STD, HIV care services), do you think that decisions regarding <u>contraception</u> are made mostly by women or men?	Female only=1 Female mostly, some male=2 Female and male =3 Mostly male, some female =4 Male only=5	
For most sexually active clients attending this facility (FP, STD, HIV care services), do you think that decisions regarding <u>condom use</u> are made mostly by women or men?	Female only=1 Female mostly, some male=2 Female and male =3 Mostly male, some female =4 Male only=5	
Have you ever heard of using a condom with another contraceptive method at the same time, like the injection with a condom, to prevent both pregnancy and infection?	Yes=1 No=0	
Do you know of a term that can be used to describe this?	Mentions "dual method use"/"dual protection "=1 Does not mention "dual method use "=0	
Have you ever heard of using a condom alone (by itself) to prevent both pregnancy and infection?	Yes=1 No=0	

Item	Responses	Code for DE
Do you know of a term that can be used to describe this?	Mentions "dual protection"=1 Does not mention "dual protection"=0	
Do you think that condoms used alone are effective in preventing <u>both</u> pregnancy and infection?	Yes=1 No=0 Don't know/unsure=9	
Would you ever suggest to a client using a condom as their only method of contraception?	Yes=1 No=0 Don't know/unsure=9	
Why or why not?		
Do you think condoms are an effective form of contraception?	Yes=1 No=0 Don't know/unsure=9	
Why or why not?		
What proportion (percentage) of sexually active clients attending this facility (FP, STD, HIV care services) do you think use <u>condoms plus another form of contraception together (dual methods)</u> in their sexual relations?	Few/None (0-10%)=1 Some, less than half (10-40%)=2 Some, about half (40-60%)=3 Some, more than half (60-90%)=4 Most/all (90-100%)=5	
What proportion (percentage) of sexually active clients attending this facility (FP, STD, HIV care services) do you think use <u>condoms alone for dual protection</u> in their sexual relations?	Few/None (0-10%)=1 Some, less than half (10-40%)=2 Some, about half (40-60%)=3 Some, more than half (60-90%)=4 Most/all (90-100%)=5	
Do you counsel clients on dual method use?	Yes=1 No=0	
What kinds of things do you tell them about dual method use?		
Are there certain types of clients who you would definitely counsel of dual method use?	Yes=1 No=0	
Who? Why?		
Are there certain types of clients who you would definitely NOT counsel of dual method use?	Yes=1 No=0	
Who? Why?		
Do you counsel clients on using a condom alone to prevent both pregnancy and STD?	Yes=1 No=0	
What kinds of things do you tell them about this?		
Are there certain types of clients who you would definitely counsel to use a condom alone to prevent both pregnancy and STD?	Yes=1 No=0	
Who? Why?		
Are there certain types of clients who you would definitely NOT counsel to use a condom alone to prevent both pregnancy and STD?	Yes=1 No=0	
Who? Why?		
Reproduction and reproductive health services		

Item	Responses	Code for DE
For most women who become pregnant, do you think they are trying to become pregnant at that time?	Yes=1 No=0 Don't know=9	
Do you think that emergency contraception is a suitable option for <u>HIV-negative women</u> who have unprotected sex and do not want to become pregnant?	Yes=1 No=0 Don't know=9	
Why or why not?		
Do you think that emergency contraception is a suitable option for <u>HIV-positive women</u> who have unprotected sex and do not want to become pregnant?	Yes=1 No=0 Don't know=9	
Why or why not?		
Do you think HIV positive people should be able to have sexual intercourse if they want to?	Yes=1 No=0 Don't know=9	
Why or why not?		
Do you think HIV positive people who are having sex need to use a condom if their sexual partner is also HIV-infected?	Yes=1 No=0 Don't know=9	
Do you think HIV positive people should be able to have (more) children if they want to?	Yes=1 No=0 Don't know=9	
Why or why not?		
Conclusion		
Are there any issues that we have not asked you about that you would like to raise regarding this topic?		
Would you like to see FP services better integrated with STD and HIV services now / in the future?	Yes = 1 No = 0	
What kinds of things do you think should be considered when integrating services?		
Why do you think FP service should or should not be integrated better integrated with STD and HIV services now / in the future?		
This is the end of the interview. Thank you for your time.		

Appendix B: Consent forms

DUAL PROTECTION STUDY-- CLIENT CONSENT FORM

We are from the School of Public Health at the University of Cape Town and the Department of Obstetrics & Gynaecology at the University of the Transkei (Walter Sisulu University).

Introduction

This consent form contains information about the research named above. In order to be sure that you are informed about being in this study, we are asking you to read (or have read you) this consent form. You will also be asked to sign it (or make your mark in front of a witness). We will give you a copy of this form. This consent form might contain some words that are unfamiliar to you. Please ask us to explain anything you do not understand.

Reason for the research

You are being asked to take part in a study to gather some information about the health of people in family planning and HIV-care services, specifically about people's decisions to use or not to use condoms and other contraception, their plans for having children, and counselling they may have received about these topics.

General Information about the study methods

We will ask you to spend 20-30 minutes of your time with us. Your participation in this study is completely voluntary. Whether or not you decide to participate in this study will not affect your health care at this or any other clinic now or in the future.

Your part in the study

If you agree to be in the study, you will be asked to answer short questions in the language that you feel most comfortable speaking. Your part in the study will last 20-30 minutes. About 60 women /men at this clinic will take part in this study and the same number from another three clinics in the Eastern and Western Cape.

Possible risks and benefits

The only risk of participation is some risk of loss of privacy; however, procedures for the protection of confidentiality will be observed to minimize this possibility. There are no guaranteed benefits to individual participants from participation, but participation in this study may help to improve health care services in the Western and Eastern Cape provinces.

If you decide not to be in the study

You are free to refuse to be in this study and it will not affect the health care you would normally receive.

Confidentiality

We will protect information about you and your taking part in this study to the best of our ability. All of the information that you provide will be kept completely private and confidential and will only be viewed and used by the researchers on this project. The health care providers at this clinic will not see this information. All information gathered will be identified only by a clinic and unique participant number and kept in confidential files. No individual identifying information will be obtained and no identifying information will be disclosed in reports, publications, or presentations. If the results of this study are published, your name will not be shown. If you decide to take part in this study, we will ask you to only answer the study questionnaire that we provide. We will record the information on a form so

that we know what you have said, but we will never record your name or anything that could be used to identify you.

Staying in the study and leaving the study

You have the right to decide not to participate in the study, to refuse to answer any questions, or to withdraw from the study at any time without any penalty. If you decide to do withdraw, please just tell the study interviewer that you wish to withdraw.

Contact for questions

If you have any questions about your rights while you are in the study or if you have a problem that you think might be related to taking in this study, please call:

Chelsea Morroni
Women's Health Research Unit
School of Public Health and Family Medicine
University of Cape Town
(021) 406 6819

or

University of Cape Town Research Ethics Committee
(021) 406 6492

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the study titled Dual Protection Study has been read and explained to me. I agree to participate as a volunteer.

Signature of volunteer

Date

If volunteer cannot read the form himself/herself, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the study.

Signature of witness

Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this study have been explained to the above individual.

Signature of study team member obtaining consent

Date

Thank you.

DUAL PROTECTION STUDY--FOCUS GROUP DISCUSSION CLIENT CONSENT FORM

We are from the School of Public Health at the University of Cape Town and the Department of Obstetrics & Gynaecology at the University of the Transkei (Walter Sisulu University).

Introduction

This consent form contains information about the research named above. In order to be sure that you are informed about being in this study, we are asking you to read (or have read you) this consent form. You will also be asked to sign it (or make your mark in front of a witness). We will give you a copy of this form. This consent form might contain some words that are unfamiliar to you. Please ask us to explain anything you do not understand.

Reason for the research

You are being asked to take part in a study to gather some information about the health of people in family planning and HIV-care services, specifically about people's decisions to use or not to use condoms and other contraception, their plans for having children, and counselling they may have received about these topics.

General information about the study methods and your part in the study

This will involve talking openly for about 60 minutes in a group of about 8-10 other patients from this clinic who have also decided to participate in the study. A trained researcher who works for the study will facilitate the group. The discussion will be conducted in the language that the group members feel most comfortable speaking. The discussion will be taped and notes will be taken so we can remember what was said, but your name and other identifying information will not be recorded. The tapes and notes will be kept completely confidential and will only be used by the study team. Your participation in this study is completely voluntary. Whether or not you decide to participate in this study will not affect your health care at this or any other clinic now or in the future.

Possible risks and benefits

The only risk of participation is some risk of loss of privacy and emotional discomfort: there is a small chance that what people talk about in the group will make you feel uncomfortable. There is also a small chance that others in the group may tell someone you were taking part or report what you said. However, procedures for the protection of confidentiality will be observed to minimize this possibility. There are no guaranteed benefits to individual participants from participation, but participation in this study may help to improve health care services in the Western and Eastern Cape provinces.

If you decide not to be in the study

You are free to refuse to be in this study and it will not affect the health care you would normally receive.

Confidentiality

No one except the group leaders and the other group members will know that you took part in this discussion. All of the information that you provide will be kept private and confidential and will only be viewed and used by the researchers on this project. The health care providers at this clinic will not see this information. The group discussion will be tape recorded with voices only. Note takers will also write down opinions and what the group thinks during the sessions, to help us remember what you have said, but we will not record your name. All

focus group tapes and notes will be locked in a cabinet at the research office at the University. We ask that participants not reveal outside the group information they may have heard in the group. Even though we will ask people in the group not to reveal anything about others, we cannot guarantee this. We will protect information about you and your taking part in this study to the best of our ability. If the results of this study are published, your name will not be shown.

Staying in the study and leaving the study

You have the right to decide not to participate in the study, to refuse to answer any questions, or to withdraw from the study at any time without any penalty. If you decide to do withdraw, please just tell the study interviewer that you wish to withdraw.

Contact for questions

If you have any questions about your rights while you are in the study or if you have a problem that you think might be related to taking in this study, please call:

Chelsea Morroni, Study leader
Women's Health Research Unit
School of Public Health and Family Medicine
University of Cape Town
(021) 406 6819

or

University of Cape Town Research Ethics Committee
(021) 406 6492

VOLUNTEER AGREEMENT FOR FOCUS GROUP DISCUSSION

The above document describing the benefits, risks and procedures for the study titled Dual Protection Study has been read and explained to me. I agree to participate as a volunteer.

Signature of volunteer

Date

If volunteer cannot read the form himself/herself, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the study.

Signature of witness

Date

MODERATOR DECLARATION FOR FOCUS GROUP DISCUSSION

I have reviewed the consent form with this study participant, and he/she fully agreed to be in this focus group. I further agree to keep confidential anything that is said in the discussion group.

Moderator's name (print clearly)

Signature of Moderator

Date

Thank you.

DUAL PROTECTION STUDY—HEALTH CARE PROVIDER CONSENT FORM

We are from the School of Public Health at the University of Cape Town and the Department of Obstetrics & Gynaecology at the University of the Transkei (Walter Sisulu University).

Introduction

This consent form contains information about the research named above. In order to be sure that you are informed about being in this study, we are asking you to read (or have read you) this consent form. You will also be asked to sign it (or make your mark in front of a witness). We will give you a copy of this form. This consent form might contain some words that are unfamiliar to you. Please ask us to explain anything you do not understand.

Reason for the research

You are being asked to take part in a study to gather some information about the health of people in family planning and HIV-care services, specifically about people's decisions to use or not to use condoms and other contraception, their plans for having children, and counselling they may have received about these topics. Specifically we are going to ask you for information about the services that you provide, your experiences of working with clients requiring information about these topics and your experiences as a provider of health care services in this clinic.

General information about the study methods

We will ask you to spend 30 minutes of your time with us. Your participation in this study is completely voluntary.

Your part in the study

If you agree to be in the study, you will be asked to answer short questions in the language that you feel most comfortable speaking. Your part in the study will last 30 minutes. About 40 healthcare providers at different clinics will be interviewed for this study.

Possible risks and benefits

The only risk of participation is some risk of loss of privacy; however, procedures for the protection of confidentiality will be observed to minimize this possibility. There are no guaranteed benefits to individual participants from participation, but participation in this study may help to improve health care services in the Western and Eastern Cape provinces.

Confidentiality

We will protect information about you and your taking part in this study to the best of our ability. All of the information that you provide will be kept completely private and confidential and will only be viewed and used by the researchers on this project. All information gathered will be identified only by a clinic and unique participant number and kept in confidential files. No individual identifying information will be obtained and no identifying information will be disclosed in reports, publications, or presentations. If the results of this study are published, your name will not be shown.

If you decide to take part in this study, we will ask you to only answer the study questionnaire that we provide. We will record the information on a form so that we know what you have said, but we will never record your name or anything that could be used to identify you.

Staying in the study and leaving the study

You have the right to decide not to participate in the study, to refuse to answer any questions, or to withdraw from the study at any time without any penalty. If you decide to do withdraw, please just tell the study interviewer that you wish to withdraw.

Contact for questions

If you have any questions about your rights while you are in the study or if you have a problem that you think might be related to taking in this study, please call:

Chelsea Morrioni, Study leader
Women's Health Research Unit
School of Public Health and Family Medicine
University of Cape Town
(021) 406 6819

or

University of Cape Town Research Ethics Committee
(021) 406 6492

VOLUNTEER AGREEMENT

The above document describing the benefits, risks and procedures for the study titled Dual Protection Study has been read and explained to me. I agree to participate as a volunteer.

Signature of volunteer

Date

If volunteer cannot read the form himself/herself, a witness must sign here:

I was present while the benefits, risks and procedures were read to the volunteer. All questions were answered and the volunteer has agreed to take part in the study.

Signature of witness

Date

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this study have been explained to the above individual.

Signature of study team member obtaining consent

Date

Thank you.

Appendix C: Qualitative findings related to dual protection

Focus group discussion methodology

A preliminary series of focus group discussions involving participants recruited from HIV care and family planning/STI services was used to identify key domains of interest by establishing normative beliefs and behaviours regarding fertility and contraception, disease prevention and condom use, as well as how and why these may be modified for HIV-infected individuals generally. Each focus group was comprised of 8-10 individuals. Participants were recruited from each service at each clinic. Group discussions lasted approximately 90 minutes, and took place in a meeting area at the clinic or nearby space. The focus group discussions were conducted in the local language (isiXhosa) by a trained facilitator. The facilitator used a pre-piloted discussion guide to ensure coverage of major topics. All focus group discussions were audio-taped for transcription and translation. Grounded theory techniques were used to analyse the data from focus group discussions. Salient themes and the range of responses were identified for each domain of investigation. Coding of all transcripts was conducted by the same two investigators to ensure reliability of coding and comparability of results across sources. In analysis we assessed the range of variations in key constructs as well as the prevalence of selected themes.

Focus group discussion findings

Knowledge related to dual protection and dual method use

The term dual protection was unfamiliar to all respondents. When directly asked about familiarity with the term no respondents were aware of it. However, there was general familiarity with the concept of dual protection:

When using injection alone, you can stop falling pregnant, but you will get infected with diseases. You need to be safe from both (Female, HIV care)

There are these diseases, so they should protect themselves from them. People don't only protect (against) pregnancy, they use a condom to prevent AIDS and STIs. (Female, Family Planning)

While participants acknowledged the dual risks of STI and pregnancy associated with unprotected sexual intercourse, they generally thought of protection against STIs and prevention of pregnancy as distinct concepts with separate solutions. Very few mentioned the value of the condom as a means of dual protection without prompting. There were some exceptions:

Some people are dumb, like they tell themselves that if they use an injection, they won't get pregnant. (They) forget about the disease part, because the condom will also work on the disease side of things and also the contraception side. So once they use the injection, they think they are done. They would not use a condom, forgetting the disease. (Female, Family Planning)

When asked directly about the purpose of condom use, most respondents both male and female, cited protection from STIs. Condom use was generally associated with protection from disease and personal safety, rather than as a means of contraception or dual protection.

The condom protects from all diseases, that's it, that's what is made for. (Female, STI)

When I think about the use of condoms, I think about prevention from HIV.
(Male, STI)

When you use a condom, you are protected from the diseases that are out there.
(Female STI)

How are condoms perceived as contraceptive options?

Condoms used on their own, were not viewed as a reliable contraceptive option. Respondents were concerned about the condom breaking, bursting or being torn, either accidentally or on purpose by the male partner. The use of a condom for contraception was very uncommon. Only one (married) female respondent mentioned that she had relied on the condom for contraception. Respondents believed that while some people did use condoms for contraception, it was not a reliable means of preventing pregnancy.

No, the condom breaks. (Female, HIV care)

It's not 100% when you use it, because it breaks. You'll find that you are not safe, because you did not see it. You only see it after you are finished that it broke. (Female, Family Planning)

There's breaking, and there's the matter of it being left inside that is what makes us uncertain. (Female, HIV Care)

It's [problem is] that it breaks, and then if you fall pregnant, he would ask, "How, when we have used a condom?" (Female, Family Planning)

You can fall pregnant when you only use a condom. You should also use an injection for contraception. The condom is mostly for the diseases. (Female, HIV care)

They don't say the condom is 100%. It just helps you with the diseases. Use contraception so you will be protected. (Female, HIV Care)

Those who were familiar with dual method use associated the condom primarily with protection against HIV/AIDS and STIs and the use of a hormonal contraceptive method as a means of preventing pregnancy. In general, respondents believed that sterilized women and pregnant women should use a condom to prevent STIs suggesting an understanding of the purpose of dual method use. However, many of the respondents indicated that if effective contraception was being used there was less of a need for and less of an incentive to use condoms at every sexual event.

The fact that the person (uses)...the injection means that they don't use the condom every time...that's the truth (Female, Family Planning)

When you use the injection, you do not use the condom, because you've got hope that nothing will happen right away. You do not think about the diseases, you just think about pregnancy. (Female, Family Planning)

In fact, it was suggested by some female respondents that condoms are seldom used with another method, despite real or perceived risk of STIs.

Condoms are only used five percent of the time I have sex because I use the depo. (Female, STI)

I can safely say that most people do not use the condom and the injection. It's too much. (Female, Family Planning)

When I first slept with my boyfriend, I used the condom, but on the fourth day, we (had) already stopped using it because I am on the family planning. (Female, Family Planning)

Both male and female respondents mentioned that dissension over condom use within a relationship was most often attributable to a lack of willingness by a male partner to use the condom.

There are no people that use [the condom] all the time. People use it and take a break on it. Like with me, I use it most of the time, but at times it happens that when he doesn't want to use it, I allow him not to. (Female, Family Planning)

(When one or both have HIV) maybe he would not want it – and say we've been using this (condom) for too long. Even if you try to explain that you are the one at risk, you are the one who is going to be sick, it is you the lady, who opens herself to accept whatever comes from him that makes you sicker. It is not used all the time. (Female, HIV Care)

Respondents indicated that negotiating condom use was easier in new relationships than long-term relationships, even among discordant couples.

It's easy to tell the one you are not used to that, "Hey, let's use a condom". (Female, Family Planning)

You rely on *isitofu* [the injection] to the usual partner and the new partner you decide to use a condom to be safe. (Male, STI)

Reposndents agreed that women are more likely than men to take the initiative with respect to dual method use, and that HIV-positive women were more likely to encourage dual method use than HIV-negative women.

Most often it is the woman's idea to use dual methods. We do not encourage them. We only want to use injectables. (Male, STI)

How does diagnosis of HIV infection change attitudes towards dual protection?

Diagnosis of HIV was generally associated with increased condom use (including dual method use) for both discordant and concordant couples. Seropositive respondents were aware of their own vulnerability in terms of other infections, as well potentially infecting HIV-negative partners, however, condom use was not always easily negotiated between partners.

When I heard I was HIV-positive, I used (the) injection and (the) condom. (Female, HIV Care)

Now that I am HIV-positive, I am using the condom and my girlfriend is using the pill. (Male, HIV Care)

I use contraception to prevent pregnancy [and] the condom protects from infection, STDs, and so I don't infect him. (Female, HIV Care)

It is not easy [to use a condom when you are HIV positive and your partner is not HIV positive]. For me, it is easy...when you both know that you have nothing. It is better when we are both positive, because we know its danger. (Female, HIV Care)

But even [with] the one who is positive, sometimes he says that since we are both positive, it is no use using a condom. We may just do it without a condom. (Female, HIV Care)

I only just started using the condom now. I was not going to use it before. I used to use the injection. (Female, HIV Care)

When you have the virus, you should always use a condom, but when you are just living your normal life, you do not have to use it. (Male, HIV Care)

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